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Strategic market orientation in mental healthcare: the application of instruments at mental healthcare providers

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Strategic market orientation in mental healthcare: the application of instruments at mental healthcare providers

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Joyce Johanna Petronella Adriana Bierbooms

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Where is the Life we have lost in living?
Where is the wisdom we have lost in knowledge?
Where is the knowledge we have lost in information?

From "The Rock" (1934) by T.S. Eliot

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Chapter 1

Introduction

Background

In the Netherlands, a substantial part of the healthcare budget (11.4%) is spent on psychiatric disorders.[1] During the last decade the number of patients in mental healthcare has increased by 10% each year, and the costs of mental illnesses have shown a 7.8% increase between 2000 and 2010.[1] In light of the current economic crisis, discussion on the costs of mental healthcare has led to several governmental measures to restrict the growth in mental healthcare expenditure.[2]

These measures are grounded in a reform of the Dutch mental healthcare system, dating back to the 2001 report issued by the former Minister of Health, Welfare and Sport (Els Borst) entitled *Vernieuwing van het zorgstelsel* (Modernization of the health system).[3] In this report she proposed to introduce fundamental changes regarding the controlling system in the healthcare sector and to develop a health insurance act for all curative healthcare.[3] The proposed changes were gradually effectuated for curative (mental) healthcare from 2006 onwards, which means that the financing system has become partially dependent on the Health Insurance Act (ZVW) and partially on the Exceptional Medical Expenses Act (AWBZ). Other financing frameworks that were introduced to the mental healthcare sector were the funding by the Ministry of Safety and Justice, and the Social Support Act (WMO; funding by the local authority).[4] In 2006 'payment by performance' was effectuated, and the Diagnosis Treatment Combinations that were already used in general hospitals were introduced in mental healthcare. This led to a new form of registration of activities in mental healthcare organizations. From 2008 onwards, ambulant treatment and the first year of clinical treatment were formally assigned to the Health Insurance Act, meaning that contracts were to be negotiated between a mental healthcare provider and the health insurance companies.[4]

Government regulation as described above is aimed at monitoring quality, accessibility and affordability, and at the same time giving space to market participants to coordinate decentralized decisions.[3] The introduction of the new Health Insurance Act has been a stimulation for health insurance companies to be more competitive, for more compliant admission criteria for healthcare suppliers, and for more possibilities and freedom of choice for individual healthcare consumers.[5] The Dutch healthcare market has developed from a supplier market to a buyer market.[6] This implies that healthcare suppliers should develop from a controlling organization to a market organization.[6] The pressure on price and quality has increased and the image a health insurance company has of a mental healthcare supplier's performance is of defining value in reaching financial contracts. Mental healthcare providers are encouraged to show their specific expertise and quality, and to demonstrate their distinguishing features compared to other suppliers.

Distinguishing from other suppliers in the market begins with the fundamentals of strategic market orientation as a starting point of policy development. This means that 'market research' should be a structural activity within mental healthcare organizations. In general, mental healthcare providers are not extensively equipped with instruments to perform this market research. Therefore, more knowledge on strategic market orientation, and possible instruments to incorporate this as a

strategic function, should be developed. A mental healthcare provider that is actively engaged in this development is *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE).

Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen (GGzE)

The Netherlands has a total of 4,700 mental healthcare providers.[7] Diversity within the field is large, ranging from self-employed psychiatrists and psychologists to psychiatric departments in general hospitals and specialized mental healthcare organizations. The Netherlands has 32 integrated specialized mental healthcare providers.[7] One of these providers is *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE). GGzE originated in 1918 under the name '*Rijkskrankzinnigengesticht Woensel*' (Eindhoven), which was the denomination for psychiatric hospitals at that time.[8] The name was later changed to '*Rijks Psychiatrisch Instituut*' (1946) and then to *'Psychiatrisch Ziekenhuis De Grote Beek'* (1986).[8] In 1996 a merger between the *'Psychiatrisch Ziekenhuis De Grote Beek'* and the Regional Institutes for Ambulant Mental Healthcare resulted in GGzE in its present form.[9] GGzE is situated in the southern part of the Netherlands and has a formal working area that includes about 527,000 inhabitants. A number of GGzE's services has a superregional function, i.e. the Clinic for Intensive Treatment (KIB), Intensive Psychiatric Family Treatment (IPG), Youth Forensic Treatment (Catamaran) and the Clinic for Forensic Psychiatric Treatment (De Woenselse Poort). In 2012 approximately 16,000 patients were treated either intramural or ambulatory.[10]

In its mission and vision GGzE proclaims to be a provider of specialized mental healthcare, which means that GGzE aims to deliver forms of supply that are not (or only to a minor extent) provided by other suppliers. Investments in (technological) innovation and research, and evidence-based medicine and practice, are value propositions GGzE commissions towards patients, chain partners and financiers. GGzE's choice of strategic positioning is aimed at an understanding of three market segments that they have identified: general regional mental healthcare, specialized regional mental healthcare, and specialized superregional mental healthcare. Within the segment of general regional mental healthcare GGzE cooperates with chain partners that are leading in delivering mental healthcare aimed at social participation and in which professional treatment is minimized. Within the segments of specialized mental healthcare, both regional and superregional, GGzE strives for product leadership and a sustainable market share.[11]

Prompted by the developments in the mental healthcare sector and the pressure that market forces impose on providers, GGzE decided to develop marketing as a central function in the organization. This was done by using both a scientific and practical approach: a PhD research and the incorporation of a marketing and sales department in the central staff of the organization.

Strategic market orientation

The concept of strategic market orientation is discussed in the literature in several ways. An

important contribution to the research in this area was made by Narver and Slater,[12] Kohli and Jaworski,[13] Porter,[14] Deshpandé *et al.*,[15] and Kotler.[16] Current literature is still based on the principles of strategic market orientation as it was developed by these researchers. Overall, they describe strategic market orientation as a function that is preliminary to developing an effective marketing concept. This function consists of an orientation on customers, competitors, suppliers, new entrants, substitutes, stakeholders, and external developments. Kotler and Clarke,[17] and Bhuian and Abdul-Gader[18] elaborate on strategic market orientation in the healthcare sector. According to Kotler and Clarke[17] a healthcare organization needs to acquire knowledge about their customers to effectively express their marketing activities. Bhuian and Abdul-Gader[18] extend this view on strategic market orientation with information on stakeholder expectations, governmental regulations, technological, economical and all other environmental developments that influence customer needs.

When looking at this literature, there are four important domains within the concept of strategic market orientation: customer demand, supply, stakeholders, and the external environment. Translated to the context of mental healthcare this can be referred to as: *mental healthcare demand, mental healthcare supply, stakeholders, and the external environment*. Within each of these domains knowledge needs to be developed in order to form a complete picture of the target market which, in this case, is the 'mental healthcare market'. For this purpose available instruments need to be assessed in the context of a mental healthcare provider. Regarding the domain *mental healthcare demand*, audience segmentation is a technique originating from social marketing that can be used to develop patient profiles, and to learn about specific demands of different subgroups within the mental healthcare population.[19-21] For identifying *mental healthcare supply*, a useful method was published by Kotler *et al.*[22] describing the process of segmentation, targeting and positioning (STP), in which portfolio analysis can be used as an instrument to identify the market attractiveness and business strength of this supply compared to other suppliers.[23-25] In addition Preble's[26] comprehensive model of *stakeholder* management can be used to analyze stakeholder relations. An exploration of the *external environment* can be conducted by using a scenario analysis instrument, with which uncertainties are identified and used for the development of multiple (realistic) scenarios.[27-29]

This section has provided a brief overview of the concept of strategic market orientation. This concept, the four domains, and the instruments that can be used to perform analyses within the different domains, are described in more detail in Chapter 2.

Purpose of the research and research questions

The focus of this study is on strategic market orientation. The overarching aim of our research is to stimulate mental healthcare providers to increasingly perform strategic market orientation as part of strategic policy development. The intended result of strategic market orientation is knowledge that leads to an understanding of which general strategic choices to make regarding the market

positioning of the organization and the marketing strategy that is following these choices. The market positioning of an organization and the choice for a particular marketing strategy is part of the development of an overall strategic policy (corporate strategy) of the organization. Besides strategic market orientation, there are different other areas that contribute to strategic policy development that are not incorporated in this study, for example human resources management, operations management and financial management. In Figure 1 this process from strategic market orientation to strategic policy development is visualized.

In this research strategic market orientation was studied by exploring different fields of literature in the different domains (mental healthcare demand, mental healthcare supply, stakeholders, and the external environment). Furthermore, a field exploration was done into the current interpretation and application of strategic market orientation in mental healthcare practice by interviewing policy makers of large mental healthcare providers in the Netherlands. The results of this literature and field exploration were brought together in a knowledge synthesis on strategic market orientation in mental healthcare, which delivered a framework for the empirical part of this research. In four empirical case studies practice-based knowledge was gathered, which is essential for further development of evidence-based decision making.[30,31] The gap between our initial framework (knowledge synthesis) and practice-based knowledge is valuable, and in current scientific beliefs[30-32] fundamental, for the development of scientific knowledge about strategic market orientation in mental healthcare.

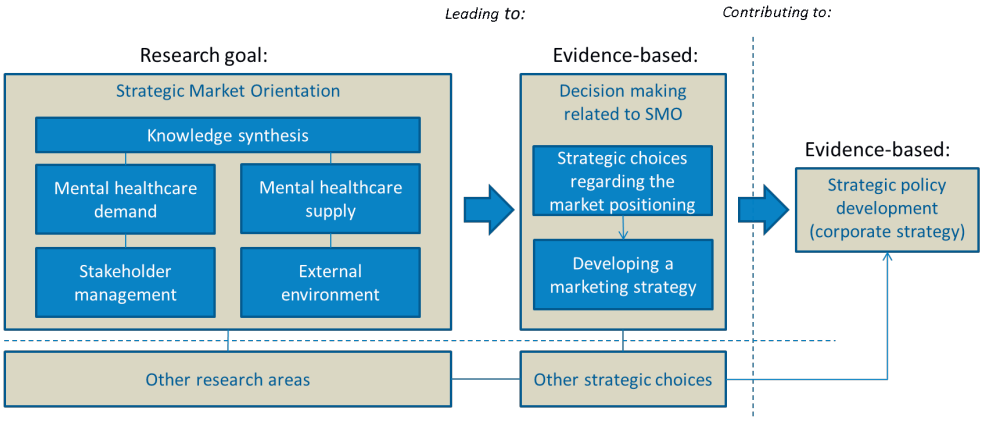

Figure 1 Process from strategic market orientation to strategic policy development

The results of this research also aim to contribute to more evidence-based decision making regarding the market positioning of a mental healthcare organization and eventually to more evidence-based decision making in strategic policy development as a whole. 'Evidence-based' is described as the best evidence available in decision making.[30,31] However, evidence-based decision making is not a synonym for pure 'science-based' decision making, but also incorporates practice-

based knowledge, and local evidence that is needed for decision making.[30,32] In order to avoid possible misinterpretation, Lewin *et al.*[32] use the term 'evidence-informed' decision making. In this thesis the term 'evidence-based decision making' explicitly refers to decision making that is a result of both science-based and practice-based knowledge and can also be read as evidence-informed decision making.

Within this study we aim to improve the general understanding of strategic market orientation in mental healthcare by developing and applying instruments within this field in a mental healthcare organization. For this aim two research questions were formulated:

1. Which instruments can be used to perform strategic market orientation in mental healthcare?
2. To what extent are these instruments applicable in the practice of mental healthcare providers?

To answer the general research questions, a literature study and field exploration by means of interviews were conducted (knowledge synthesis) to develop a framework for this research. Following this, four case studies were designed in which the above mentioned four domains in the field of strategic market orientation in mental healthcare were investigated at GGzE. This was done based on a specific problem definition within the area of strategic market orientation that was posed by the organization. The results of the case studies are twofold: they deliver specific, practical, answers to these questions and form the empirical foundation for the applicability of instruments within strategic market orientation. Subsequently, the integrated knowledge on strategic market orientation derived from the case studies is the basis for more evidence-based decision making in mental healthcare both on the level of strategic choices regarding the market positioning of the organization and the contribution to an overall strategic policy. In summary, this thesis consists of 3 layers, of which 2 layers are the actual focus of this research:

1. Specific results answering the problem definition that was posed by GGzE in each case study;
2. Generalizing these specific results to knowledge on the applicability of instruments within strategic market orientation for mental healthcare providers.

This leads to the discussion of a third layer in this thesis:

3. From knowledge on strategic market orientation towards evidence-based decision making in mental healthcare.

The layers of our research can be linked to what is called the 'knowledge hierarchy' in scientific literature.[33-39] The following section provides an introduction to the knowledge hierarchy in order to explain the layers of our research from this theoretical context.

An introduction of the knowledge hierarchy

The knowledge hierarchy (Figure 2) is a fundamental model described in the literature to explain

the processes from data to information, to knowledge, and to wisdom.[33-39] The key principle of the knowledge hierarchy is that an 'understanding' of data, information and knowledge is required to create 'wisdom' for decision making.[34-36]

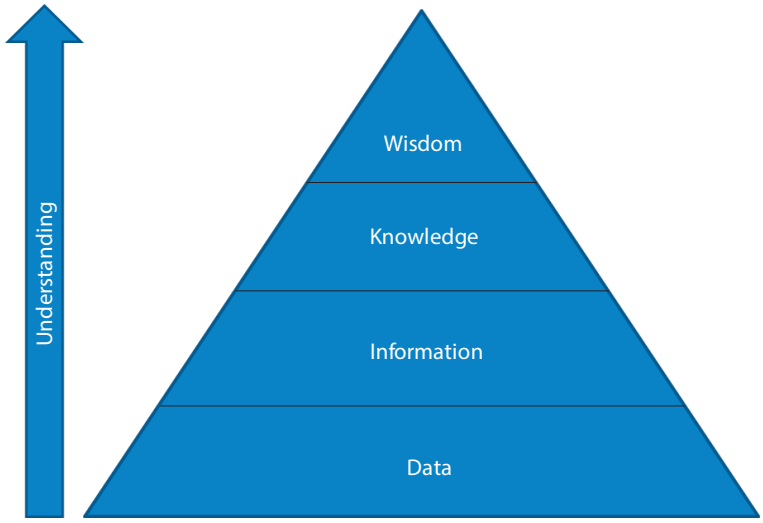

Figure 2 Knowledge hierarchy[33-39]

The literature suggests that the process of transforming data into information can be described as the structuring of data into information[34,35] or by the cognitive processes in the brain that add meaning to something.[34] The transformation from information to knowledge is described as a process in which information is complemented with understanding and competence.[34,36] Knowledge is furthermore explained by tacit (implicit) and explicit knowledge.[37,38] This description, in which explicit knowledge is seen as a manifestation of tacit knowledge, blurs the difference between information and knowledge.[34] Also, the difference between wisdom and knowledge is explained in the literature by the term 'understanding'.[34-36] According to the literature wisdom concerns the understanding of principles, and the personal or organizational competence to make judgments about right and wrong decisions.[34,36-39] Wisdom should enable people to answer the question 'why', while knowledge helps to answer the question 'how' to do something.[36] As becomes clear from the literature, the concept 'understanding' is a key principle in transferring from data to information, from information to knowledge, and from knowledge to wisdom.[34-36] The increasing complexity in the hierarchy requires a rising level of understanding.[36]

Referring back to our research, the focus is on the development of 'knowledge' in the field of strategic market orientation in mental healthcare. For this purpose 'data and information' are gathered through a knowledge synthesis and empirical explorations (case studies). The ultimate aim is to stimulate a mental healthcare provider to use this knowledge for more evidence-based

decision making, which can be referred to as 'wisdom'. This link between the knowledge hierarchy and the layers of our research has led to the design and outline of this thesis, that is described in the following paragraphs.

Research design

Because relatively little knowledge is available on strategic market orientation in mental healthcare, we chose an exploratory design for our research. First, we performed a study to gain insight into the available knowledge on strategic market orientation in combination with an initial examination of the possibilities this would offer in the practice of mental healthcare providers. By integrating this information, which was gathered by performing a literature exploration and interviews with (large) mental healthcare providers in the Netherlands, we were able to develop a knowledge synthesis on strategic market orientation in mental healthcare, which constituted the framework for the empirical part of our research.

An exploration of the practical opportunities for further development of this knowledge and the practical application of this concept was performed with a multiple case study design, in which four empirical case studies at GGzE were performed. These case studies addressed two major aims. The initial aim of the case studies was to provide information about a specific question or problem GGzE is facing, by using instruments regarding strategic market orientation. The second and overall aim of the case studies was to assess the applicability of instruments in the field of strategic market orientation at a mental healthcare provider, in order to contribute to answering the general research questions of this study. The findings resulting from the first aim (practical information) are a contribution to the second aim of this study, while these practical results are the basis for the assessment of the applicability of the instruments.

Outline of the thesis

The design of the study forms the outline for this thesis (Figure 3).

Chapter 2 discusses the results of the knowledge synthesis; this chapter outlines the investigation of available literature and field information regarding strategic market orientation in mental healthcare, which leads to the conceptual framework for the empirical case studies.

Chapters 3 to 6 present the empirical results of the case studies. Chapter 3 describes the results of the application of audience segmentation to determine patient profiles in mental healthcare. Chapter 4 describes the main findings of a stakeholder analysis and assesses the usefulness of this method. The results and implications of the application of scenario analysis are presented in Chapter 5. The final case study, evaluating the process of the development of a marketing strategy in mental healthcare delivery, is described in Chapter 6.

Chapter 7 reflects on the overall applicability and an integral approach of instruments for

strategic market orientation in mental healthcare, leading to a functional model. In addition, we discuss the implications of the results in the light of evidence-based decision making, leading to recommendations for practice and further research. The first two layers of this outline are the goal of this research. The thesis as a whole captures all three layers described in this chapter, whereas the development from knowledge towards more evidence-based decision making is reflected on in the discussion chapter (Chapter 7).

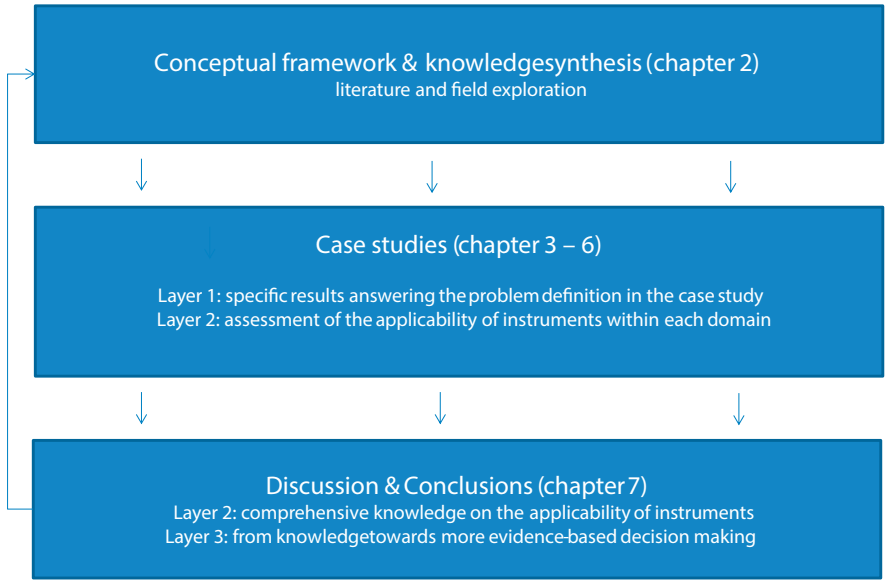

Figure 3 Outline of the thesis

In this thesis, this discussion specifically focusses on evidence-based decision making related to the focus of this research, which is strategic market orientation, and the intention that this leads to more evidence-based strategic choices regarding the market positioning of the organization and the development of a marketing strategy. Ultimately, this aims to contribute to more evidence-based decision making in the overall strategic policy making of mental healthcare providers.

References

1. Slobbe LCJ, Smit JM, Groen J, Poos MJJC, Kommer GJ. Cost of illness in the Netherlands 2007: Trends in healthcare expenditure 1999-2010. Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu (National Institute for Public Health and the Environment); 2011.
2. Ministry of Health, Welfare and Sports. Voornemens curatieve GGZ. Pub. L. No CZ/FBI- 3066636 (10 June 2011).
3. Ministry of Health, Welfare and Sports. Nota: Vraag aan bod: Hoofdlijnen van vernieuwing van het zorgstelsel. Kamerstuk 27855 nr. 2 (6 June 2001).
4. Dutch Association of Health and Addiction Care (GGZ Nederland). Financiering GGZ [document on the internet]. 2013 [cited 16 September 2013]. Available from: http://www.GGznederland.nl/beleid-in-de-GGz/beleidsthemas/financiering-GGz/financiering-GGz.html.
5. Ministry of Health, Welfare and Sports. Wijziging van de Wet cliëntenrechten zorg, de Wet gebruik burgerservicenummer in de zorg, de Wet marktordening gezondheidszorg en de Zorgverzekeringswet (cliëntenrechten bij elektronische verwerking van gegevens). Kamerstuk 33509 nr. 3 (4 January 2013).
6. Wentink T. Business performance management, Sturen op prestatie en resultaat. Den Haag: Boom Lemma uitgevers; 2008.
7. Dutch Association of Health and Addiction Care (GGZ Nederland). Kerncijfers GGZ [document on the internet]. April 2013 [cited 17 September 2013]. Available from: http://www.GGznederland.nl/de-GGz-sector/GGz1308-01-kerncijfers-GGz_def.pdf.
8. De Hoo F, Popeyus E. De komst van Joseph Alexis K.: de 75 jarige geschiedenis en ontwikkeling van een rijksinstelling tot Ziekenhuis De Grote Beek. Eindhoven: De Hoven; 1993.
9. ShareAll. Introductie nieuwe medewerkers GGzE [document on the internet]. 6 June 2013 [cited 17 September 2013]. Available from: http://prezi.com/yoogpiiojncc/introductie-nieuwe-medewerkers-GGze/.
10. Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen (GGzE). Jaardocument 2012. Eindhoven: GGzE; 2013.
11. Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen (GGzE). Een Bijzonder Verhaal, Meerjarenbeleidsplan 2013-2016. Eindhoven: GGzE; 2013.
12. Narver JC, Slater SF. The effect of a market orientation on business profitability. J Mark 1990;54(4):20-34.
13. Kohli AK, Jaworski BJ. Market Orientation: The Construct, Research Propositions, and Managerial Implications. J Mark 1990;54(2):1-18.
14. Porter ME. The five competitive forces that shape strategy. Harv Bus Rev 2008;86(1):78-93.
15. Deshpandé R, Farley JU, Webster FE Jr. Corporate culture, customer orientation, and innovativeness in Japanese firms: A quadrad analysis. J Mark 1993;57:23-27.
16. Kotler P. From sales obsession to marketing effectiveness. Harv Bus Rev 1977;55:67-75.
17. Kotler P, Clarke RN. Marketing for health care organizations. Englewood Cliffs: Prentice-Hall; 1987.
18. Bhuian SN, Abdul-Gader A. Market orientation in the hospital industry. Mark Health Serv 1997;17(4):36-45.
19. Boslaugh SE, Kreuter MW, Nicholson RA, Naleid K. Comparing demographic, health status and psychosocial strategies of audience segmentation to promote physical activity. Health Educ Res 2004;20(4):430-438.
20. Moss HB, Kirby SD, Donodeo F. Characterizing and reaching high-risk drinkers using audience segmentation. Alcohol: Clin Exp Res 2009;33(8):1336-1345.
21. Slater MD (1996). Theory and method in health audience segmentation. J Health Commun 1996;1(3):267-83.
22. Kotler P, Shalowitz J, Stevens RJ. Strategic marketing for health care organizations: building a customer-driven health system. San Francisco, CA: Jossey-Bass; 2008.
23. Bridges JF, Terris DD. Portfolio evaluation of health programs: a reply to Sendi et al. Soc Sci Med 2004;58(10):1849-1851.
24. Drain M, Godkin L. A portfolio approach to strategic hospital analysis: exposition and explanation. Healthc Manag Rev 1996;21(4):68-74.
25. Sendi P, Al MJ, Rutten FFH. Portfolio theory and cost-effectiveness analysis: a further discussion. Value Health 2004;7(5):595-601.

26. Preble JF. Toward a comprehensive model of stakeholder management. Bus Soc Rev 2005;110(4):407-431.
27. Wright G, Van der Heijden K, Burt G, Bradfield R, Cairns G. Scenario planning interventions in organizations: An analysis of the causes of success and failure. Futures 2008;40:218-236.
28. Van der Heijden K. Scenarios: the art of strategic conversation. Chichester, UK: Wiley; 1996.
29. Duncan NE, Wack P. Scenarios designed to improve decision making. Plan Rev 1994;22(4):18-25.
30. Sackett DL, Rosenberg WMC, Muir Gray JA, Brian Haynes RB, Scott Richardson W. Evidence-based medicine, what it is and what it isn't [Editorial]. Br Med J 1996;312:71-72.
31. Jenicek M. Epidemiology, evidence-based medicine, and evidence-based public health. J Epidemiol 1997;7(4):187-197.
32. Lewin S, Oxman AD, Lavis JN, Fretheim A, Garcia Marti S, Munabi-Babigumira S. (2009). Support tools for evidence-informed policymaking in health II: Finding and using evidence about local conditions. Health Res Policy Syst 2009;7(Suppll): SII. doi:10.1186/1478-4505-7-SI-SII.
33. Ackoff RL. From Data to Wisdom. J Appl Syst Anal 1989;16:3-9.
34. Rowley J. The wisdom hierarchy: representations of the DIKW hierarchy. J Inf Sci 2007;33(2):163-180.
35. Tuomi I. Data Is More than Knowledge: Implications of the Reversed Knowledge Hierarchy for Knowledge Management and Organizational Memory. J Manag Inf Syst 1999/2000;16(3):103-117.
36. Bellinger G, Durval C, Mills A. Data, Information, Knowledge, and Wisdom [document on the internet]. 2004 [cited 13 January 2009]. Available from: http://www.systems-thinking.org/dikw/dikw.htm.
37. Braganza A. Rethinking the data-information-knowledge hierarchy: towards a case-based model. Int J Inf Manag: J Inf Prof Arch 2004;24(4):347-356.
38. Grover V, Davenport TH. General perspectives on knowledge management: Fostering a research agenda. J Manag Inf Syst 2001;18(1):5-21.
39. Hicks RC, Dattero R, Galup SD. The five-tier knowledge management hierarchy. J Knowl Manag 2006;10(1):19-31.

Chapter 2

Strategic market orientation in mental healthcare

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Abstract

System amendments, budget cuts and market forces have led to a deregulation of the Dutch (mental) healthcare system. Mental healthcare providers are forced to critically examine their strategic position, which increases the need for more knowledge on the strategic market orientation tools that are applicable in mental healthcare. The literature shows that a mental healthcare provider needs to develop knowledge within four domains of strategic market orientation: mental healthcare demand, mental healthcare supply, stakeholders, and the external environment. This article aims to answer the question as to which information and instruments are available for mental healthcare providers to develop this knowledge. Information was gathered via telephone interviews with policymakers and advisors of nine large mental healthcare providers in the Netherlands, complemented with the literature related to the four domains. This resulted in a knowledge synthesis on strategic market orientation in mental healthcare. This knowledge synthesis provides mental healthcare providers with a framework that needs to be operationalized in practice, leading to concrete guidelines for the development of a marketing function in mental healthcare organizations.

Keywords

Strategic market orientation, Knowledge synthesis, Mental healthcare demand, Mental healthcare supply, Stakeholders, External environment.

Introduction

General background

In the Netherlands, mental healthcare consumption, costs, and budgets have shown substantial growth in the last decade. From 2001 onwards, the number of patients using mental healthcare has increased by 10% each year.[1] According to the international definition of the System of Health Accounts, expenditure on psychiatric disorders in the Netherlands amounts to 11.4% (excluding dementia and intellectual impairments) of total healthcare costs, which is relatively high compared with expenditure on other diseases. Of all costs related to psychiatric disorders, about 35% is delivered by secondary mental healthcare. Between 2000 and 2010, costs in mental healthcare have risen by 7.8% whereas healthcare expenditure in general has increased by 6.4%.[2] To control the ongoing expansion of budgets, and in light of the current economic situation in the Netherlands, in 2012 governmental steps were taken that resulted in a budget cut in curative mental healthcare of ±17% (±€593 million).[3]

Besides these politically dictated budget cuts, market forces have entered healthcare. The incentive for this process was the system amendments that were carried out in the last 5–10 years.[4] This led to a deregulation of a large part of the healthcare system, enabling health insurance companies to control the realization of budgets for mental healthcare. Prices are no longer fixed but are negotiable, implying that health insurance companies look for the best value for money among multiple suppliers. As a result, several new entrants with comparable services have appeared on the mental healthcare market. A process of marketing and sales now determines which provider is preferred by patients and health insurance companies to deliver the proposed services, against which price.

Under the pressure of budget cuts and market forces in the Netherlands, mental healthcare providers are forced to critically examine their healthcare portfolio and their strategic position on a regional and super-regional level. For many providers this means changing their existing business structures, which requires some sort of marketing function. However, such a marketing function is not always incorporated in the system of all mental healthcare providers. Market research by mental healthcare providers is generally performed based on professional expertise, the dynamics within a business unit, or perceived field experiences. Although a few organizations have positioned marketing as a central function, in practice mental healthcare providers generally lack the knowledge and tools to adequately anticipate market forces. Therefore, there is a need to develop more knowledge on strategic market orientation and subsequently develop tools that can be used to disseminate this knowledge and implement marketing as an organizational function among mental healthcare providers.

Theory on market orientation

Various terms are used to describe an organization's activities aimed at gaining knowledge on

supply and demand and strategic positioning to adapt to market developments, i.e. 'market analysis',[5–7] 'market research',[8–10] and 'market orientation'.[11–16] The articles cited most often use the term 'market orientation'.[14–16] A profound market orientation is known to contribute to an organization's performance, which has led to the establishment of several market orientation models. Fundamental research in this area was conducted by Narver and Slater,[14] Kohli and Jaworski,[15] Porter,[16] Deshpandé *et al.*[17] and Kotler.[18] Within their models these authors define the concept of market orientation, describe the relevant process steps, and indicate which information is relevant to be able to use this market orientation for strategic decision-making. Other authors have contributed by specifying and applying these models.[12,13]

In the earlier literature, market orientation is viewed as a function in which customers, competitors, suppliers, new entrants, substitutes, and the external environment are important determinants in defining an effective marketing concept.[16,18] Narver and Slater[14] extended this market orientation model by adding inter-functional coordination, which refers to the internal organization of the marketing function within companies. These authors also emphasize that all aspects of market orientation should be viewed along two decision criteria: long-term focus and profitability.[14] Kohli and Jaworski[15] present similar concepts in their model, adding the aspect of generating and disseminating 'market intelligence', in other words 'market information'. Deshpandé *et al.*[17] emphasize the role of other stakeholders (e.g. supply chain partners, financiers, governmental institutions) as an additional aspect of market orientation.

With respect to the healthcare sector, Kotler and Clarke[19] describe market orientation as an activity in which an organization acquires knowledge about customer needs and subsequently expresses marketing activities in an innovative, cost-efficient, and integrated manner. According to Bhuian and Abdul-Gader,[20] the information a healthcare provider needs to collect concerns: information on current and future customer needs, information on stakeholder expectations, information on government regulations, and information on technological developments, economic developments, and all other environmental influences that affect customer needs.

Summarizing the existing theory on market orientation shows that there are four important domains about which a healthcare provider needs information: customer demand, supply, stakeholders, and the external environment. These domains are extracted from the key elements of market orientation mentioned in the literature (summarized in Table 1; column 3). The most central domain (mentioned in virtually all the literature about market orientation) concerns customer demand. Regarding customer demand, it is important to know the extent and characteristics of the target group, the need for products or services, and the influence of certain customer groups on strategic choices.[14–16,19,20] A second important domain is knowledge about available supply. This means forming a picture of the organization's market position, in terms of a portfolio analysis, a competition analysis, and knowledge about other suppliers that offer similar or substitute products.[14–16,18] The third domain relates to obtaining information about the significance of the different stakeholders of the organization. These stakeholders can have a large impact on

the organization's purposes and the choices made with regard to services and supply.[16,17,20] The fourth domain that should be taken into account is the external environment, which refers to developments on a social, political, economic, and sector-specific level. All these developments may influence customer demand and needs, and the possibilities an organization has to establish or maintain a market share.[14,18–20]

Table 1 Brief summary of theory in the market orientation literature.

	Authors	Key elements	Domains of strategic market orientation
General market orientation	Kotler[18]	Role of the external environment, customers and competitors	Customer demand Supply External environment
	Porter[16]	Five competitive forces: buyers, suppliers, new entrants, substitutes, competitive rivalry	Customer demand Supply Stakeholders
	Narver and Slater[14]	Three behavioral components: customer orientation, competitor orientation, inter-functional coordination; long-term focus and profitability	Customer demand Supply External environment
	Kohli and Jaworski[15]	Market information about customers and competitors	Customer demand Supply
	Deshpandé *et al.*[17]	Central role of customer value; considering stakeholder demands	Customer demand Stakeholders
Market orientation in healthcare	Kotler and Clarke[19]	Information about customer needs, innovation, cost-effectiveness	Customer demand External environment
	Bhuian and Abdul-Gader[20]	Information about current and future customer needs; about stakeholder expectations, government regulations and environmental influences	Customer demand Stakeholders External environment

Research question

Budget cuts and market forces exert pressure on mental healthcare providers to reconsider their strategic positioning and rearrange their existing marketing processes and routines. Therefore, more knowledge on strategic market orientation tools, applicable in mental healthcare, should be developed and implemented.

On the basis of theory, we can conclude that mental healthcare providers need to develop knowledge on strategic market orientation regarding the four domains of customer demand, supply, stakeholders, and the external environment. Within the context of mental healthcare, these domains can be translated as mental healthcare demand, mental healthcare supply, stakeholders, and the external environment. Subsequently, there is a need to find tools that enable mental

healthcare providers to apply this knowledge as marketing instruments.

The aim of this article is to describe a knowledge synthesis based on the current situation of the availability of information and instruments regarding strategic market orientation in mental healthcare. This leads to the following research question: *How can a mental healthcare provider develop and use knowledge on strategic market orientation?*

Other questions addressed in this article are:

- How are the different domains of strategic market orientation interpreted in mental healthcare?
- What information is available concerning strategic market orientation in mental healthcare?
- What are the possibilities and impediments to use information on strategic market orientation in practice?
- Which instruments are available to apply this information?

Methods

The information we used for the knowledge synthesis stems from two main sources: telephone interviews and examination of the relevant literature. From the interviews we gained practice-based knowledge about the availability and use of information and instruments on market orientation in mental healthcare. To strengthen this with theoretical knowledge, we used the interview results as a basis to search for complementary literature.

For the telephone interviews 13 large mental healthcare institutions in the Netherlands were approached. The interviews included questions aimed at gathering information regarding the interpretation of concepts, the availability of information, the use of information, and the use of instruments regarding the four domains. To obtain a representative sample, we decided to approach the largest mental healthcare provider in each of the 12 Dutch provinces. Within these provinces, the four largest cities, Amsterdam, Rotterdam, Utrecht, and the Hague, were included. However, because Rotterdam and the Hague are located in the same province, one province was approached twice, resulting in a total of 13 organizations that were invited to participate. Of these organizations, nine responded positively, one organization declined, and three organizations did not respond after repeated requests. Not included in the respondents were organizations from the provinces of Friesland, Gelderland, and Overijssel. In the response group, the cities of Rotterdam and the Hague were eventually represented by one organization that was formed after a recent merger.

Respondents of the interviews had a strategic or managerial function within their organization. After nine different interviews no new information emerged from the interviewees (saturation level); therefore, we then decided to stop contacting organizations that had not yet responded to the interview request. A written report was made of each of the interviews, which was then returned to the respondents for their verification.

In our search for relevant available literature, rather than making a complete literature review we searched for key articles in this area based on the results that emerged from the telephone interviews. These key articles served as a complementary source for our knowledge synthesis on strategic market orientation. The keywords used for our search in PubMed and ABI/Inform databases were care demand, care supply, stakeholders in combination with healthcare, healthcare environment in combination with developments, uncertainties, and scenario analysis. In addition, the snowball method was used to extend our examination of the literature.

Data emerging from the telephone interviews and the literature were coded using the four domains as a framework. Within these domains, the results were divided into the two data sources: interviews and literature. For the knowledge synthesis we grouped the information under four main topics: interpretation of the concept, availability of information, use of information, and use of instruments.

Results

This section discusses the results based on the four domains: mental healthcare demand, mental healthcare supply, stakeholders, and the external environment.

Mental healthcare demand

Interviews

The interviews show that, in practice, mental healthcare providers interpret the concept 'mental healthcare demand' as a *manifest* demand for care. In other words, a specific market demand for services emerges, to which a mental healthcare provider needs to adapt. In several cases this demand is thought to be direct; in other cases, however, the need for care is indirect due to the manifestation of problems or impairment in a person's personal or social environment (e.g. family disputes, agitation in the neighborhood, late payment problems, or dropout from work or school). As a result of this, the respondents emphasize the possibility of mental healthcare demand remaining latent. It is also indicated that (ideally) mental healthcare demand should be defined as a patient *need*. However, for several reasons this is almost impossible in practice. First, in the Netherlands, patients need a referral from a general practitioner to be able to register at a specialized mental healthcare provider. Second, whether a mental healthcare provider is able to deliver care depends on the available budget. Finally, although the prevalence of psychiatric disorders reveals an apparent need for care facilities, actual care consumption by means of registration data is (in many cases) seen as the best information available as an indication for the need for care.

All organizations involved in the interviews indicate that they use registration data (the number of patients, production numbers, and waiting lists) on care service use to clarify the demand for mental healthcare. Some mental healthcare providers indicate that they translate national longitudinal prevalence studies on psychiatric disorders[21] to a regional level, in order to determine

the extent of the problems in their own service area. According to the respondents, some of the information that is currently insufficiently used is information derived from data on diagnosis/treatment combinations and/or information from psychiatric case registers. According to the respondents, knowledge gained from the organization's practice and professional experience should subsequently contribute to better knowledge of mental healthcare demand.

The respondents indicated that anticipating market dynamics also entails knowing how care demand may develop in the coming years. In practice, forecasting future care demand is an exercise that often leads to the projection of demographic information to the current patient population. In other words, future care demand is often being related to changes in the demographic composition of the population. It was indicated that this is also an important pitfall in the prediction of care demand, given that several other factors (e.g. personal, social, political, and economic changes) may also have a considerable impact on the development of mental healthcare.

Literature

In the literature, the concept 'healthcare demand' is defined in various ways. Frequently used concepts are 'health status', 'care need', '(manifest) care demand', and 'care service use'.[22-24] On the basis of these definitions, there are differing ways in which a mental healthcare provider can accumulate information about mental healthcare demand, varying from using data on the prevalence of psychiatric disorders, to care service use registered in electronic patient files. Besides information on numbers and trends, studies have examined the relationship between care service use and the influence of demographic factors such as age,[25–28] gender,[28–32] and ethnicity,[27–33] or of social factors such as level of education, unemployment, and income.[25] Also, personal conditions and a person's social environment influence the need for care, manifesting a mental healthcare demand, and getting access to specialized mental healthcare facilities.[22,25,27–29,34,35] In addition, community resources, personal resources, organizational factors, and the extent and quality of personal relationships of a potential patient determine the possibilities for access to care services.[24] The availability of supply and the related costs are additional influences on care service use.[28]

The Dutch NEMESIS studies are an important source of information about mental healthcare demand. Some of these studies explore the translation from epidemiological data to what is needed in mental healthcare supply.[21,22,30] However, there is a risk of missing potential patients who have a latent need for mental healthcare.[30] Methods to obtain knowledge on latent mental healthcare need include performing surveys or translating theoretical models to practice by examining indicators or risk factors.[27] In literature and in practice, care service use is reported to be the best measurable indicator to identify care demand.[36–38] It also provides a method to reveal trends, e.g. when following data on care service use over a longer period. Obtaining knowledge about the factors that influence care service use, that is useful for mental healthcare providers to anticipate expected mental healthcare demand, requires modeling the existing theory to a specific situation.[27] To enable a mental healthcare provider to anticipate care demand entails accumulating

statistical data, together with knowledge on distinctive characteristics of the target population that influence the demand for care.[39] In the Dutch addiction care sector, this latter aim has been achieved by developing patient profiles.[40] Using such patient profiles, knowledge is obtained about the characteristics and the need for care of a specific group in order to establish a better match between demand and supply.[40]

Mental healthcare supply

Interviews

Besides gaining more insight into current and future mental healthcare demand, the telephone respondents indicated that it is equally important to know one's market position and the organization's added value compared with other suppliers. This implies that market research and marketing activities should be an integral part of policy development, which most organizations currently lack. A few mental healthcare providers indicate that specific research into the organization's position is being performed. This is done by mapping the organization's specific expertise and comparing that with similar providers. The goal is to validate strategic choices within the range of supply regarding which services should and should not be continued.

However, research on the strategic position of the organization is not performed on a regular basis. According to the respondents, this is due to the monopolistic position large specialized mental healthcare providers had until recently. The realization that a marketing strategy has in fact become indispensable, seems to have reached all organizations in mental healthcare. However, according to the interviewees, the actual implementation of such ideas has not yet started. The interviews reveal that, as more information becomes available, more action in this area of work is being incorporated in policy planning processes. Although some organizations have a specific department for marketing and sales activities, in most organizations these activities are carried out by different departments which lack central coordination. According to the respondents, the reasons for this are mainly financial and leads to these activities being poorly vouched for in the organization.

The lack of marketing activities is partly attributed to the lack of instruments in mental healthcare organizations to carry out this process. Most respondents felt the need to develop a more structured process in developing a marketing strategy, i.e. a need to translate existing 'traditional' marketing instruments to the practice of mental healthcare suppliers, and a need for the information required to apply these instruments.

Literature

In the literature we found guidelines to obtain knowledge about the market position of different types of services, and to choose a marketing strategy that should enable mental healthcare providers to be both recognizable and distinctive. Several authors refer to this *strategic marketing process* as a model in which four phases need to be completed: problem orientation, analysis, decision-making, and implementation.[41–43] For (mental) healthcare providers this means that the

process consists of market research, determining the organization's market position, developing a market strategy and value proposition, and finally translating this into a marketing strategy and marketing activities.[42]

A vision of the market position provides healthcare organizations with guidelines to choose a market strategy, which determines how the organization wants to position itself in relation to customers, stakeholders, and other providers.[44,45] From this market strategy, an organization should be able to formulate its value proposition, which is a proposal to customers with regard to an organization's products or services and its distinctive customer value.[42] Subsequently, the marketing strategy will support the chosen market strategy and can be developed by describing the way in which demand and supply are met.[42] Kotler *et al.*[46] refer to this process as segmentation, targeting, and positioning.

To perform these steps of developing a marketing strategy, first, the different *market segments* and customer groups need to be identified, followed by the organization's choice as to which segments are important for the company's products. Second, *targeting* means producing an image of one's market position. Besides gathering demand-oriented information, the organization needs to understand their product portfolio, and how this relates to their competitor's supply.[46] A competitor's analysis is needed, which is offered by the model of the five competitive forces described by Porter.[16] After the market position has become clearer, an organization needs to decide on its main market strategy. Treacy and Wiersema[45] distinguish three value disciplines: operational excellence (best total cost), product leadership (best product), and customer intimacy (best total solution). The value disciplines express the core competencies of the organization and form the basis for a market strategy.[43] To determine the value proposition, three perspectives are important: internal, external, and interactive marketing.[47] This model, referred to as the holistic marketing model, helps organizations to analyze and optimize customer services from these three viewpoints. Finally, *positioning* means choosing your marketing strategy and implementing your marketing activities.[42,46] The seven p's of marketing[48] is a useful instrument to develop a marketing strategy: product, price, place, promotion, people, processes, and physical evidence. For a mental healthcare provider to gain insight into the market position and to be able to establish a distinctive supply, knowledge is needed about the feasibility of this strategic marketing process in mental healthcare.

Stakeholders

Interviews

A mental healthcare provider appears to be largely dependent on a number of stakeholders regarding their policy development. The interviewed respondents regularly mention financiers, supply chain partners, referring practitioners, and local government as relevant stakeholders to establish their supply. Another issue raised is that stakeholders are a source of information and, on the other hand, also demand information (e.g. a referring practitioner or financier). A good

relationship with stakeholders is seen as being very important in reaching company goals and being able to provide what is needed for people with mental health problems within or from outside the region.

Information that is obtained from stakeholders ('field' information) is regarded as highly valuable. It is used as an important source in policy planning, because it provides market information about healthcare demand and is also a source of information for determining the organization's market position. A specific role seems to be filled by the financier, who determines the financial boundaries that mental healthcare providers must comply with. The interviewees indicate that currently there is a lack of knowledge about the relationship with stakeholders, and of guidelines showing how this could positively influence the organization's performance.

The results show that mental healthcare providers are interested in obtaining knowledge about the relationships with different stakeholders, and the stimulating and impeding factors regarding an effective policy implementation and the organization's performance. What is needed, but is currently not available, is a structured and registered stakeholder policy plan. To achieve this, a stakeholder analysis is considered indispensable. This should be an iterative process that is continuously incorporated in the organization's multiyear policy planning.

Literature

In the literature on stakeholder management, it is stated that healthcare organizations have to deal with hyper-turbulent environments in which stakeholders have a significant influence.[49] Stakeholders are, for example, financiers, referring practitioners, government, volunteers, and patients.[50] Proactive stakeholder management will result in a continuous fit between the organization, its environment, and its stakeholders.[51] The main goal is to manifest the organization's strategic choices[52] and to realize success, performance, and market share.[53] Organizations are dependent on the support of stakeholders to achieve this.[54] Literature also shows that stakeholder information is needed to be able to effectively improve the organization's performance.[51,54–56] Therefore, a stakeholder *analysis* is the first step, which produces useful information about the need for actions and the consequences of these actions on the organization's market position.[51]

There are many reports on the possibilities organizations have to successfully achieve an understanding of stakeholder expectations.[51,54–56] Within this process stakeholders should be identified and grouped according to their comparable features. Subsequently, the relationship between the organization and its different stakeholder groups is identified, followed by a process of strategic choices regarding the involvement of stakeholders with regard to specific policy themes.[51]

Although much research has focused on how to perform stakeholder analysis in large organizations, until recently an integral model for this type of research was lacking. Preble[51] filled this gap by developing a conceptual model on stakeholder analysis as an integrative part of an organization's policy cycle. This model comprises six steps: (1) stakeholder identification, (2) determining stakeholder expectations, (3) analyzing performance gaps, (4) determining stakeholder

salience, (5) developing an organizational response, and (6) monitoring and controlling stakeholder relationships.[51] The first step is to identify all stakeholders that have an interest in or could influence the results of an organization.[51] A stakeholder map can be a constructive way to visualize which stakeholder groups are relevant and what relationships exist.[57] To determine stakeholder expectations, an accountability framework is available in which the interests of stakeholders are classified according to political, commercial, community, and clinical accountability.[55] Following the identification of stakeholder expectations, performance gaps should be determined.[51] Stakeholder management is about managing divergent interests of stakeholders; therefore, organizations must know whether the results they deliver match stakeholders' aims and expectations.[58] Strategic choices are dependent on the determination of stakeholder salience, which means the priority that is given to different stakeholders by the organization.[54] Within this model the identified stakeholder groups are analyzed based on three scales: power, legitimacy, and urgency. This determines the nature of stakeholders and, subsequently, stakeholder salience and the priority an organization must give to one or more stakeholder groups.[54] These different aspects, combined in the model of Preble,[51] seem to provide a tool for stakeholder analysis as part of strategic market orientation for mental healthcare providers.

External environment

Interviews

The interviews revealed a high level of awareness of the fact that demographic, economic, and social developments can have a large influence on mental healthcare demand. However, the actual execution of policy preparation often lacks a thorough analysis of the external environment and is therefore not a solid foundation for determining future mental healthcare demand and the need for supply for specific groups. To determine the appropriate set of services, measurable variables are often taken into account, such as data on production and costs.

The interviews also showed that a few mental healthcare providers use environmental trends in their market orientation process. On the basis of these developments, two of the respondents indicated that they will develop scenarios for further policy planning. One example of this is to assess the influence of market forces on the one hand and socio-economic developments on the other, and then develop a concept of possible futures (scenarios) based on these assessments. According to the interviewees, this method generates valuable additional information, in addition to the statistical trends.

In the interviews it was indicated that the use of information on the external environment becomes increasingly important in the current market situation. It is stated that this type of information should be gained from discussions with financiers, referring practitioners, supply chain partners, and locally involved parties such as the police, schools, housing corporations, and local government. A mental healthcare provider should then be able to create an image of developments and scenarios on the medium to long term. In the Netherlands, applying a scenario method is rarely

done on a regional level. Some respondents found this remarkable, because developing scenarios on a regional level contributes to a shared vision between a mental healthcare provider and its cooperating partners which, ultimately, is beneficial for patients.

Literature

According to the literature, strategic market orientation also covers identification of the influence of the societal context on the positioning of an organization, especially when this organization operates in a public sphere.[59–61] Therefore, information on demographic, political, economic, and societal developments is essential for a mental healthcare provider to arrange adequate care supply.[59–61] On a national level, much information is available on these topics based on data from, e.g. the Netherlands Institute for Social Research (SCP), the Netherlands Bureau for Economic Policy Analysis (CPB), and the National Institute for Public Health and the Environment (RIVM). In order to use this information, a mental healthcare provider needs to translate this information to a regional or organizational level.[62]

Until recently, strategic planning was mainly based on calculations and mathematical extrapolations to forecast future healthcare demand. From the 1990s onwards, there has been more focus on the need for a qualitative analysis and to take into account different scenarios for a solid policy planning.[62,63] The key element of working with scenarios is to try and identify uncertainties in the external environment and anticipate these uncertainties with policy measures.[59,61,64] In the 'Public Health Status and Forecasts' report from the National Institute for Public Health and the Environment (RIVM) demographics, economic, social and cultural developments, technology, and (public) space are mentioned as key factors that influence public health.[65] This type of information is also verified on a regional level in certain areas in the Netherlands.[66] In the specific field of mental healthcare, trend analysis and scenario studies are carried out by the National Center of Expertise on Mental Health and Addiction (Trimbos Institute).[67,68] If a mental healthcare organization is able to translate this information to its own regional and organizational context, this can be very useful in strategic market orientation.

To collect this information about an organization's external environment and influencing factors regarding health, care demand, and care supply, the first step is to identify all certain and uncertain developments that influence this process. The next step is to develop different scenarios that are realistic but not necessarily certain. These scenarios provide guidelines for strategic planning and for gaining insight into the future need for mental healthcare supply.[59–61]

Knowledge synthesis

The results from the telephone interviews and analysis of the literature can be subdivided into four items for each of the four domains related to our research questions, i.e. interpretation, availability of information, use of information, and use of instruments. First, information was gathered on how the domains are defined and interpreted. Second, the availability of information based on

these interpretations was explored. Third, the results describe how this information can be made applicable. Finally, we looked at the current and possible use of instruments to actually apply the information for strategic market orientation purposes. All this leads to a knowledge synthesis (Table 2).

Discussion

A first exploration of the existing marketing literature shows that to perform a good strategic market orientation, several market forces are relevant: customer demand, supply, stakeholders, and the external environment. Projected onto the healthcare market, these

concepts were adapted to mental healthcare demand, mental healthcare supply, stakeholders, and the external environment. The current situation regarding the availability and use of information and instruments related to these domains was explored by performing telephone interviews with the largest mental healthcare organizations in the Netherlands, and an examination of the relevant literature. The gathering of information, on the one hand, and the practical application of information on the other, are preconditions to convert information into knowledge. The results enabled us to outline a knowledge synthesis (Table 2), from which a strategic market orientation function for mental healthcare providers can be further developed.

In establishing strategic market orientation as a function in the mental healthcare organization, it is important to consider that it consists of multiple domains, comprised of interrelated aspects. Developing a marketing strategy for mental healthcare supply is dependent on knowledge about mental healthcare demand. A mental healthcare provider will benefit from a good relationship with stakeholders regarding their performance, which will strengthen their market position. Mental healthcare demand depends on developments in the external environment and should not be seen as an isolated domain. The use of epidemiologic information is only valuable when one knows which other suppliers are active in the same market segment, because then one can assess one's own market share.

In short, information on the different aspects of market orientation is more useful when it is integrated into knowledge. In addition, each of the instruments mentioned in Table 2 is partly dependent on information that is found in one or more of the other domains. Finally, by integrating all information, any conflicting interests regarding the four domains can be detected and reconsidered.

All information on the four domains discussed above, form the input for the use of market orientation instruments. Knowledge about these domains is produced by using the available instrumentarium. Within the instrumentarium a central issue is the development of tools that show 'how' this information can be applied, leading to the desired knowledge.

Table 2 Knowledge synthesis of practice and theory on strategic market orientation

	Interpretation	Availability of information	Use of information (possibilities and impediments)	Use of instruments
Mental healthcare demand	I: Prevalence, mental healthcare need, manifest or latent care demand, care service use.	I: Prevalence data and numbers on care service use are available; information on mental healthcare need would be useful, but is not available (difficult to measure).	I: Translation of epidemiological information to a regional level determine the extent of problems in the service area; registration data on care service use to determine need, supply and budgets; much information is registered but not used, because of insufficient possibilities to transfer data to information.	I: Projection of epidemiological information on regional demographics, the drawback being that external factors (other than demographic changes) are not accounted for.
	L: Psychiatric disorders, care need, care demand, care service use, influencing factors.	L: Data on psychiatric disorders and care service use are available; information on influencing factors is available in literature.	L: Translation of epidemiological information; registration data to identify care service use, translation of theoretical models on indicators for care demand.	L: Compilation of statistical information and influencing factors; developing patient profiles.
Mental healthcare supply	I: Market position, market research, added value.	I: Lack of information on market position; very little market research is performed to gain this information.	I: Developing a marketing strategy not incorporated in planning process; few organizations with a marketing department to perform these activities.	I: Lack of knowledge and instruments, translation needed of 'traditional' marketing techniques.
	L: Market position, market strategy, marketing strategy.	L: Guidelines to obtain knowledge about market position (four phases): problem orientation, analysis, decision making and implementation.	L: Information can be used along Kotler's[46] model: segmentation, targeting, positioning.	L: Identifying market segments, making a portfolio and competitors analysis, determining value disciplines and implementing marketing activities by use of the 7 p's model (product, price, place, promotion, people, processes, physical evidence).

→

Stakeholders	I: Relationship with financiers, supply chain partners, local government.	I: Stakeholders are a source for information regarding planning supply; information about the relationship is vital for improving results.	I: Stakeholder information regarding the relationship, expectations and perceived performance is currently not regularly gathered or used.	I: Stakeholder analysis leading to a stakeholder policy plan would be a good instrument to improve stakeholder relations.
	L: Improving performance through optimizing the relationship with financiers, referring practitioners, government, volunteers and patients.	L: Information is gathered through stakeholder analysis. Key steps are available in literature (see 'use of instruments').	L: Identification of stakeholder groups, the expectations of stakeholders and bridging the gap between expectations and actual performance, leading to a stakeholder policy plan.	L: Stakeholder analysis consisting of: stakeholder identification, determining stakeholder expectations, analyzing performance gaps, determining stakeholder salience, developing organizational response, monitoring relationships.
External environment	I: Exploring demographic, economic and societal developments.	I: Lack of information about the external environment due to a lack of measurable variables.	I: Identification of environmental trends, drawing scenarios; this is seen as necessary, but rarely performed in practice.	I: Scenario analysis on a regional level.
	L: Information on demographic, political, economic and societal developments.	L: Information from reports of the Netherlands Institute for Social Research, the Netherlands Bureau for Economic Policy Analysis and the National Institute for Public Health and the Environment; this is information on a national level, regional information is available through regional public health departments.	L: Exploring the environment and developing scenarios; not solely calculations about future care demand; scenarios as a source of information about uncertainties, leading to a broader scope.	L: Scenario analysis by identifying key uncertainties, drawing scenarios, leading to guidelines for policy planning.

I = interview-based information; L = literature-based information

A number of instruments have been briefly discussed here. Although these instruments are not the only ways to design strategic market orientation, they appear to be useful in the context of mental healthcare providers. These instruments together should enable an organization to answer the question as to how strategic market orientation should take place in mental healthcare.

Practical applicability will be tested using different case studies at a mental healthcare provider in the Netherlands. Within these case studies the theoretical background will be further explored. Finally, practical applicability will be tested based on a concrete problem related to the organization.

Conclusion

To develop knowledge on strategic market orientation, information from both practical and theoretical perspectives needs to be grouped and integrated. To convert this information into knowledge, it is important to collect data on existing information and knowledge about instruments that enable to apply this information for specific purposes. Future research should focus on using existing knowledge to develop a toolbox that enables mental healthcare providers to sustain and anticipate market developments in the (near) future. Follow-up research should result in concrete guidelines for mental healthcare providers with regard to each of the domains of strategic market orientation, as well as the domains as a whole, the use of different instruments, and how all this can lead to a better positioning and marketing in the future.

The knowledge synthesis presented here provides a framework that should be operationalized in practice by further exploring the theoretical background and by generating empirical data from different case studies.

References

1. Dutch Association of Health and Addiction Care (GGZ Nederland). Sector report 2010: valued care. Amersfoort: GGZ Nederland; 2009.
2. Slobbe LCJ, Smit JM, Groen J, Poos MJJC, Kommer GJ. Cost of illness in the Netherlands 2007: Trends in healthcare expenditure 1999–2010. Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu (National Institute for Public Health and the Environment); 2011.
3. Ministry of Health, Welfare and Sports. Voornemens curatieve GGZ. Pub. L. No CZ/FBI-3066636 (10 June 2011).
4. Van de Ven WPMM, Schut FT. Guaranteed access to affordable coverage in individual health insurance markets. In: Smith PC, Glied S (eds.) Oxford handbook of health economics. Oxford: Oxford University Press; 2011.
5. Ruzo E, Barreiro JM, Losada F. Competitive market analysis from a demand approach – an application of the Rotterdam demand model. Int J Market Res 2006;48(2):193–236.
6. Kress GJ, Snyder J, De Kluyver CA. Forecasting and market analysis techniques: a practical approach. Int J Forecasting 1996;12(1):179–80.
7. Wood MJ, Hoban RE. Strategic market analysis: an effective tool for collaboration. Healthc Strategy Manag 1993;11(5):14–6.
8. Witell L, Kristensson P, Gustafsson A, Löfgren M. Idea generation: customer co-creation versus traditional market research techniques. J Serv Manag 2011;22(2):140–59.
9. Stevenson R. Welcoming people with mental health problems into mainstream market research. Int J Market Res 2011;53(6):737–48.
10. Maas P, Martin E. Hatching a new identity – market research breathes new life into an existing brand. Mark Health Serv 2009;29(1):8–13.
11. Trabert G. The development of the Public Health System between an increasing market orientation (Commercialisation) and social responsibility. Zentralbl Chir 2008;133(1):39–45.
12. Sen B. Defining market orientation for libraries. Library Management 2006;27(4/5):201–217.
13. Webster RL, Hammond KL, Harmon HA. Market orientation toward various customer groups in business schools. Allied Academies International Conference. Academy of Marketing Studies; 2005.
14. Narver JC, Slater SF. The effect of a market orientation on business profitability. J Mark 1990;54(4):20–34.
15. Kohli AK, Jaworski BJ. Market orientation: the construct, research propositions, and managerial implications. J Mark 1990;54(2):1–18.
16. Porter ME. The five competitive forces that shape strategy. Harv Bus Rev 2008;86(1):78–93.
17. Deshpandé R, Farley JU, Webster FE Jr. Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. J Mark 1993;57:23–7.
18. Kotler P. From sales obsession to marketing effectiveness. Harv Bus Rev 1977;55:67–75.
19. Kotler P, Clarke RN. Marketing for health care organizations. Englewood Cliffs: Prentice-Hall; 1987.
20. Bhuian SN, Abdul-Gader A. Market orientation in the hospital industry. Market Health Serv 1997;17(4):36–45.
21. Bijl RV, Ravelli A, Van Zessen G. Prevalence of psychiatric disorder in the general population: results of the Netherlands Mental Health Survey and Incidence Study (NEMESIS). Soc Psychiatry Psychiatr Epidemiol 1998;33:587–95.
22. Ten Have M, Vollebergh W, Bijl RV, De Graaf R. Predictors of incident care service utilisation for mental health problems in the Dutch general population. Soc Psychiatry Psychiatr Epidemiol 2001;36:141–9.
23. Post D, Stokx LJ. Volksgezondheid Toekomst Verkenning 1997 VI Zorgbehoefte en zorggebruik. Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu (National Institute for Public Health and the Environment); 1997.
24. Andersen RM. Revisiting the behavioral model and access to medical care: does it matter? J Health Soc Behav 1995;36(1):1–10.
25. Kovess-Masfety V, Alonso J, Brugha TS, Angermeyer MC, Haro JM, Sevilla-Dedieu C. Differences in lifetime use of services for mental health problems in six European countries. Psychiatr Serv 2007;58(2):213–20.
26. Alonso J, Codony M, Kovess-Masfety V, Angermeyer MC, Katz SJ, Haro JM, et al. Population level of unmet need for mental healthcare in Europe. Brit J Psychiatry 2007;190(4):299–306.

27. Aoun S, Pennebaker D, Wood C. Assessing population need for mental health care: A review of approaches and predictors. Ment Health Serv Res 2004;6(1):33–46.
28. Hendryx MS, Ahern MM. Access to mental health services and health sector social capital. Adm Policy Ment Health 2001;28(3):205–18.
29. Kamperman AM, Komproe IH, De Jong JTVM. Migrant mental health: a model for indicators of mental health and health care consumption. Health Psychol 2007;26(1):96–103.
30. Bijl RV, Ravelli A. Psychiatric morbidity, service use and need for care in the general population: results of the Netherlands Mental Health Survey and Incidence Study. Am J Public Health 2000;90(4):602–7.
31. McAlpine DD, Mechanic D. Utilization of specialty mental health care among persons with severe mental illness: the roles of demographics, need, insurance, and risk. Health Serv Res 2000;35(1):277–92.
32. Lefebvre J, Lesage A, Cyr M, Toupin J, Fournier L. Factors related to utilization of services for mental health reasons in Montreal, Canada. Soc Psychiatry Psychiatr Epidemiol 1998;33(6):291–8.
33. Harris KM, Edlund MJ, Larson S. Racial and ethnic differences in the mental health problems and use of mental health care. Med Care 2005;43(8):775–84.
34. Nelson CH, Park J. The nature and correlates of unmet health care needs in Ontario, Canada. Soc Sci Med 2006;62:2291–300.
35. Gunther NC. De buurt als sleutel: sociale indicatoren en het gebruik van geestelijke gezondheidszorg. Een onderzoek naar de voorspellende waarde van sociale indicatoren in het kader van buurtgerichte preventie. Tijdschr Psychiatr 1993;35(10):675–90.
36. Roeg DPK, Westert GP, Van Oers JAM. Van latere zorg. Toekomstverkenning naar de aansluiting tussen zorgvraag en zorgaanbod in Noord-Brabant tot 2025. Een voorstudie. Tilburg: Tilburg University; 2008.
37. Van Bilsen PMA, Hamers JPH, Groot W, Spreeuwenberg C. Welke zorg vragen ouderen. Een inventarisatie. Tijdschr Gezondheidswetenschappen 2004;82(4):221–8.
38. Westert GP, Smits JP. Onderzoek naar zorggebruik en de toegankelijkheid van de gezondheidszorg. In: Plogh T (ed.). Handboek gezondheidszorgonderzoek. Houten: Bohn Stafleu van Loghum; 2007.
39. Van Campen C. Profielen van vragers naar AWBZ-GGZ. Den Haag: Sociaal en Cultureel Planbureau (the Netherlands Institute for Social Research); 2009.
40. Wits E, Rodenburg G, Knibbe R. Richtlijn voor het opstellen van cliëntprofielen in de verslavingszorg. Amersfoort: Resultaten Scoren; 2007.
41. Moenaert R, Robben H. Marketing, strategy & organization: building sustainable business. Leuven: Lannoo Campus; 2011.
42. Frambach R, Nijssen E. Marketingstrategie, breaking the rules. Groningen/Houten: Noordhof Uitgevers; 2009.
43. Van Leeuwen S. Zorgmarketing in de praktijk, succesvol invoeren van marketing in de gezondheidzorg. Assen: Van Gorcum; 2010.
44. Poiesz T, Caris J. Ontwikkelingen in de zorgmarkt, een strategische analyse. Deventer: Kluwer; 2010.
45. Treacy M, Wiersema F. De discipline van marktleiders, kies uw klanten, verklein uw focus, domineer uw markt. Schiedam: Scriptum Books; 2010.
46. Kotler P, Shalowitz J, Stevens RJ. Strategic marketing for health care organizations: building a customerdriven health system. San Francisco, CA: Jossey-Bass; 2008.
47. Kotler P. Holistic marketing: a broad, integrated perspective to marketing management. In: Sheth J, Sisodia R (eds.) Does marketing need reform. Armonk, NY: M.E. Sharpe; 2006.
48. Zeithaml VA, Bitner MJ, Gremler DD. Services marketing, integrating customer focus across the firm. Boston: McGraw Hill; 2009.
49. Rotarius T, Liberman A. Stakeholder management in a hyperturbulent health care environment. Healthc Manag 2000;19(2):1–7.
50. Balser D, McClusky J. Managing stakeholder relationships and nonprofit organization effectiveness. Nonprofit Manage Leadersh 2005;15:295–315.
51. Preble JF. Toward a comprehensive model of stakeholder management. Bus Soc Rev 2005;110(4):407–31.

52. Freeman RE. Strategic management: a stakeholder approach. Boston: Pitman; 1984.
53. Mellahi K, Wood G. The role and potential of stakeholders in 'hollow participation': conventional stakeholder theory and institutionalist alternatives. Bus Soc Rev 2003;108(2):183–202.
54. Mitchell RK, Agle BR, Wood DJ. Toward a theory of stakeholder identification and salience: defining the principle of who and what really counts. Acad Manag Rev 1997;22(4):853–86.
55. Dansky KH, Gamm LS. Accountability framework for managing stakeholders of health programs. J Health Organ Manag 2004;18(4):290–304.
56. Rowley TJ. Moving beyond dyadic ties: a network theory of stakeholder influences. Acad Manag Rev 1997;22:897–910.
57. Walker DHT, Bourne LM. Influence, stakeholder mapping and visualization. Construction Manag Econ 2008;26:645–58.
58. Frooman J. Stakeholder influence strategies. Acad Manag Rev 1999;24:191–205.
59. Wright G, Van der Heijden K, Burt G, Bradfield R, Cairns G. Scenario planning interventions in organizations: an analysis of the causes of success and failure. Futures 2008;40:218–36.
60. Postma TJBM, Liebl F. How to improve scenario analysis as a strategic management tool? Technol Forecasting Soc Change 2005;72:161–73.
61. Van der Heijden K. Scenarios: the art of strategic conversation. Chichester, UK: Wiley; 1996.
62. Postma TJBM, Vijverberg AMM, Bood RP, Terpstra S. Toekomstverkenning met scenario's. Een hulpmiddel bij de bepaling van de strategische koers van een organisatie. Bedrijfskunde 1995;67(2):13–9.
63. Bunn DW, Salo AA. Forecasting with scenarios. Eur J Operational Res 1993;68(3):291–303.
64. Duncan NE, Wack P. Scenarios designed to improve decision making. Plan Rev. 1994;22(4):18–25.
65. De Hollander AEM, Hoeymans N, Melse JM, Van Oers JAM, Polder JJ (eds.) Zorg voor gezondheid – Volksgezondheid Toekomstverkenning. Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu (National Institute for Public Health and the Environment); 2006.
66. Van Bon-Martens MJH, Van de Goor LAM, Achterberg PW, Van Oers JAM. The development of an empirical model for regional public health reporting. A descriptive study in two Dutch regions. Scand J Public Health 2011;39:608–17.
67. Lokkerbol J, Smith F, Walburg J. Effecten van de eigen bijdrage: drie scenario's. Maandblad Geestelijke volksgezondheid 2011;66(10):705–8.
68. Van Hoof F, Vijselaar J, Kok I. Van overheidssturing naar marktwerking. Stand van zaken en toekomstscenario's in de GGZ. Maandblad Geestelijke volksgezondheid 2009;64(4):239–55.

Chapter 3

Mental healthcare demand

Submitted for publication in a mental health policy and services journal as:
Bierbooms JJPA, Bongers IMB, Reemers B, Van Oers JAM. Audience segmentation as a stepping stone towards demand oriented policy making in mental healthcare: a mixed methods case study in the Netherlands.

Abstract

Introduction. Mental healthcare providers are increasingly having to operate in a market oriented way, which is paramount to demand oriented decision making. To be able to make sound judgments about the needs of a target population, a suitable tool may be found in 'audience segmentation', a well-known instrument in social marketing.

Methods. To explore the application of audience segmentation for demand oriented decision making in mental healthcare, a mixed methods case study design was applied in a single case study within a mental healthcare provider in the Netherlands.

Results. The use of audience segmentation revealed three segments of patients, each with different characteristics that, ideally, should represent a different demand in the provision of health services.

Discussion. Audience segmentation proved to be an effective instrument to acquire knowledge about a patient population in mental healthcare, which benefits better demand oriented decision making.

Keywords. Mental healthcare demand, Audience segmentation, Policy making, Mixed methods design.

Introduction

In recent times, the Dutch mental healthcare sector has undergone fundamental changes in the manner in which it is financed and controlled. Twenty years ago budgets were completely dictated by the government, whereas now a large part of the mental healthcare budget is negotiated with healthcare insurance companies. This reform towards a more 'market-oriented' healthcare system, has resulted in increased influence of stakeholders on the care delivery process. The role of stakeholders such as referring practitioners, housing corporations, chain partners and other healthcare organizations has increased in importance: the move toward more ambulatory treatment has forced mental healthcare providers to work together with housing corporations, to transfer budgets from specialized mental healthcare to primary care and to reassess relations with referring practitioners and other healthcare organizations. At the same time, the number of patients in mental healthcare increased by 10% each year between 2001 and 2009 (Dutch Association of Health and Addiction Care, 2009). The growing number of mental healthcare patients, in combination with the greater influence of different stakeholders and market forces due to budget cuts and changing regulations, is forcing mental healthcare providers to take a more market oriented approach.

Market orientation

Market orientation finds its origins in business models aimed at improving performance and increasing profit in organizations (Deshpandé, Farley, & Webster, 1993; Kohli & Jaworski, 1993; Kotler, 1977; Narver & Slater, 1993; Porter, 2008). Following the introduction of market forces in the healthcare sector, these models have also been adapted and applied to healthcare organizations (Bhuian & Abdul-Gader, 1997; Kotler & Clarke, 1987; Lefebvre & Flora, 1988; Walsh, Rudd, Moeykens, & Moloney, 1993). According to the literature, market orientation for healthcare organizations encompasses four domains: healthcare demand, healthcare supply, stakeholders and the external environment (Bierbooms, Bongers, & Van Oers, 2012). For each of these domains, information should be gathered and processed into knowledge about the specific segment of the (mental) healthcare market, using tools that are suitable for a (mental) healthcare provider (Bierbooms et al., 2012). In this article the focus of the study is on the domain 'mental healthcare demand'.

Mental healthcare demand

The needs of mental healthcare patients, the total of which we refer to as 'mental healthcare demand' is the central domain of market orientation in mental healthcare. The services of a mental healthcare organization are aimed at fulfilling the needs of individuals with mental health problems that do or do not have a manifest demand for care. Indeed, were it not for patients' needs for mental healthcare, mental healthcare providers would not exist. There are several definitions that are used to describe mental healthcare demand, of which frequently used

terms are: 'health status', 'care need', '(manifest) care demand' and 'care service use' (Andersen, 1995; Post & Stokx, 1997; Ten Have, Vollebergh, Bijl, & De Graaf, 2001). This would indicate that mental healthcare providers gather information about the needs ('demand') of their target population in various ways, such as data on prevalence of psychiatric disorders, by examining care services used that are registered in the electronic patient files, and by collecting additional contextual data (demographics, social-economic information, personal situation) to identify risk factors and a potential need for care (Bierbooms et al., 2012). In the literature as well as in the field of Dutch mental healthcare providers, the most frequently used interpretation of mental healthcare demand is that of 'care service use', as it is the easiest indicator to measure (Van Bilsen, Hamers, Groot, & Spreeuwenberg, 2004; Westert & Smits, 2007). Research into statistical data and distinctive characteristics of a patient population helps a mental healthcare organization gain insight into specific mental healthcare demand (Van Campen, 2009). This technique is also referred to as 'developing patient profiles' in order to reach a better match between demand (patient needs) and supply (provision of healthcare) (Wits, Rodenburg, & Knibbe, 2007). A tool that is both scientifically sound and practical that can be used to find patient profiles in mental healthcare, has not yet been identified (Bierbooms et al., 2012).

Audience segmentation

In social marketing a technique that is often used to define homogeneous subgroups within a population is *audience segmentation* (Boslaugh, Kreuter, Nicholson, & Naleid, 2004; Moss, Kirby, & Donodeo, 2009; Slater, 1996). Audience segmentation results in a population being divided into various subgroups with shared characteristics, which represents a common demand (Boslaugh et al., 2004; Moss et al., 2009; Slater, 1996).

To segment a population into two or more homogeneous groups one must first decide which criteria are suitable for this purpose. Marketing literature states: "In general, segments must be definable, mutually exclusive, measurable, accessible, pertinent to an organization's mission, reachable with communication in an affordable way, and large enough to be substantial and to service economically." (Grunig, 1989). Slater (1996) elaborates on these criteria by adding that audience segmentation should be able to be used to influence knowledge, attitudes and behavior. The difficulty is to find variables within the accessible data, that are distinct enough to be able to substantially differentiate subgroups within a population (Slater, 1996). The simplest level of classification is based on demographic variables, such as age, gender, race, income, and combinations of these variables (Boslaugh et al., 2004). More specific segmentation strategies use psychosocial, geographic, behavioral, and psychographic variables, or a combination of these (Boslaugh et al., 2004). Audience segmentation therefore has two general steps: 1. Identifying determinants of knowledge, attitude or behavior and 2. Finding audience segments based on the identification of these determinants in the target population (Boslaugh et al., 2004; Gehrt & Pinto, 1990; Slater, 1996; Stone, Warren, & Stevens, 1990; Wolff et al., 2010). Sijbrandij, Jonker, and Wolf

(2008) propose a similar approach: they describe as a first step finding variables with which patient profiles are constructed based on a theoretical framework, similar to what Slater (1996) proposes in his first step of audience segmentation. According to Sijbrandij et al. (2008) this is followed by a statistical analysis of available data to find segments within the population *and* a testing and coding of these segments by interviewing a professional panel.

The purpose of audience segmentation, according to social marketing literature, is to create a knowledge base with regard to the beliefs and behaviors of a population in order to develop appropriate communication strategies (Boslaugh et al., 2004; Slater, 1996; Wolff et al., 2010). In this case study the purpose is not primarily to develop communication strategies, but to generate knowledge about the mental healthcare demand of a population in support of demand oriented decision making. In this article we discuss the question whether audience segmentation is a useful method with this aim in mind.

Research question

Can audience segmentation be used to develop patient profiles in mental healthcare, and can these patient profiles provide mental healthcare organizations with useful knowledge about mental healthcare demand within their target population that can aid demand oriented decision making?

Case description

In the Netherlands, mental healthcare is organized in two dominant settings, either as intramural institutionalized mental healthcare, or as ambulatory, mainly face-to-face, treatment given locally or in a patient's home. In Europe, the Netherlands has one of the highest bed ratios (number of beds/number of inhabitants) in mental healthcare. Since the 1990s, there has been a move to reduce the number of inpatient beds and substitute intramural treatment and hospital stay with highly specialized ambulant care. Due to a number of reasons (i.e. financial incentives, lack of social support, urbanization) the intended deinstitutionalization has not reached its aims. In light of recent cut-backs, the discussion has been renewed and has led to the sector committing itself to a self-imposed target, to reduce the number of beds by 20% by 2020. A mental healthcare provider in the southern part of the Netherlands, *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE), has set itself the same target, which has led to the question in which areas within current clinical supply the number of beds might be reduced. Knowledge about characteristics of mental healthcare demand of different groups of patients can help to decide on measures to reduce clinical capacity. The psychotic disorder center of GGzE is one of the areas in which clinical bed reduction is considered feasible. The subsidiary questions that were addressed in the case study were:

- Which patient factors support and impede deinstitutionalization?
- Which patient profiles can be distinguished in the clinical setting of the psychotic disorder center of GGzE and what effect can they have on deinstitutionalization?

Methods

To answer the research question, a mixed methods case study design was chosen and undertaken in a single case study at a mental healthcare provider in the Netherlands: *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE). Within this case study the segmentation technique in accordance with Sijbrandij et al. (2008) was used to develop different patient profiles for clinical inpatients with psychotic disorders who may be suitable for extramural treatment.

Research design

The study is an explorative case study in which both qualitative and quantitative research methods have been used, namely a literature review, a cluster analysis and paired interviews.

Literature review

A review of the literature was conducted to investigate supporting and impeding patient factors aimed at clinical bed reduction in mental healthcare. These factors were used as variables to gather data on the current population of clinical inpatients at the psychotic disorder center of GGzE. These variables were used to conduct a cluster analysis. In the literature on audience segmentation, cluster analysis is described as a statistical method to identify segments within a certain population (Boslaugh et al., 2004; Moss et al., 2009; Stone et al., 1990; Sijbrandij et al., 2008). A definition of cluster analysis is given by Burns and Burns (2008) as: "the partitioning of a sample into homogeneous classes to produce an operational classification". In this case, these homogeneous groups form a certain number of patient profiles that can help answer the question whether deinstitutionalization is feasible for certain groups of patients. The patient profiles that emerged from the cluster analysis were interpreted in more detail by means of interviews with key persons within the psychotic disorder center. To evaluate the usefulness of the method on an organizational level, interviews were held with strategic stakeholders within the GGzE organization. Literature was gathered from the 'ISI Web of Science' and 'OVID' database. The search terms that were used are displayed in Table 1.

Table 1 Search terms literature review

Search area	Specific search terms
Mental health care	Psychiatric, mental health care, psychiatry
Deinstitutionalization	Deinstitutionalization, diminishing beds, declining beds, dehospitalization
Characteristics	Patient/client characteristics, patient/client features, patient/client determinants, patient/client factors, patient properties

This search resulted into 699 hits. A screening of the titles and abstracts resulted in a selection of 36 articles. Backwards and forwards snowballing led to a total of 47 articles that were read in their entirety. Ultimately, 25 articles were found relevant with a view to finding supporting and

impeding patient factors for deinstitutionalization. Patient factors were included when they were behavioral, (socio-)demographic or clinical in nature, because these are factors that are commonly used for audience segmentation strategies (Boslaugh et al., 2004). This resulted in a list of 87 patient factors that was reduced to 18 patient factors after combining duplicates and merging closely related factors.

Cluster analysis

Data on the appearance of these patient factors within the research population (i.e. clinically treated patients of GGzE's psychotic disorder center), were gathered from existing databases within the organization. Two sources appeared to contain useful information: the Electronic Patient Record (EPR) and the Routine Outcome Measurement (ROM) systems. From the EPR system data was extracted regarding demographic and clinical factors. From the ROM system two measurement instruments were used: The Health of the Nation Outcome Scale (HoNOS) and the Manchester Short Assessment of quality of life (MANSA). These instruments contain data regarding behavioral and (socio-)demographic factors. Data of all three measurement systems were merged into one database based on the variable 'unique patient number'. If information could not be gathered on all the variables, those patients with missing data were not included in the study. This left a patient sample of 111. Six patient factors could not be extracted from existing data, which left data on 12 patient factors available for the cluster analysis.

Following the gathering of data on the relevant patient factors, the cluster analysis was conducted based on IBM SPSS 19. In order to dispose of comparable data, all variables were standardized according to their Z-scores. Subsequently, the amount of clusters was determined using Ward's method with squared Euclidean distance. A plotted dendrogram and the Ward's coefficients were used to determine the optimal amount of clusters. In the next step every single case (unique patient number) was assigned to a cluster. This resulted in segments of patients with homogenous characteristics as compared to the other clusters. To test the contribution of each of the variables one way-ANOVA was conducted.

Paired interviews

Semi-structured interviews were held with three GGzE professionals on an operational (2 clinicians), tactical (2 managers of the psychotic disorder center) and strategic level (marketing manager). The interviewees were selected based on their involvement with deinstitutionalization policy. The interviews on operational and tactical levels were held to determine the amount of clusters and to gain more in-depth knowledge on the different patient profiles uncovered by the cluster analysis. The interview with the strategist was held to investigate whether audience segmentation was useful to policy development, in this case with a focus on deinstitutionalization. For the interview on a strategic level, a member of the board was also asked to participate, however this interview was repeatedly cancelled and it was not possible to reschedule within the timeframe of the study.

The interviews were recorded and transcribed. The interview data was coded using Atlas TI. The data was segmented and reassembled using the spiral of analysis of Boeije (2010). Data fragments were labeled by open coding and axial coding was used to combine quotations within codes. Selective coding was used to compare codes and quotations in different categories.

Results

The results of this study are twofold: it answers the subsidiary questions as they were posed in the case study at GGzE and it discusses the results on the general research question. Firstly, the results of the separate steps in the case study (literature study, cluster analysis and interviews) are presented, discussing the patient profiles that were developed in relation to the deinstitutionalization debate. The general research question regarding the applicability of the audience segmentation technique to gain knowledge about mental healthcare demand for demand oriented decision making, is discussed based on a reflection on the usage of the audience segmentation technique in the case study at GGzE, complemented with interview data on the perceived applicability of the method by strategic management. The results section of the article covers the case study results and ends with a brief reflection on the interview data regarding the applicability of audience segmentation in mental healthcare. Following this, the general research question is further elaborated on in the discussion section.

Supporting and impeding patient factors for deinstitutionalization (literature review)

Literature was reviewed on patient factors having an impeding or supporting effect on deinstitutionalization. Demographic variables that were described in the literature are: physical impairments, living with a partner/marital status, economic poverty, homelessness, education, employment, living situation, gender, and age (see Table 2 for references). Mainly impeding patient factors for deinstitutionalization that are mentioned are: physical impairments, economic poverty, homelessness, a lower education level, unemployment, living alone, a younger age and male gender are impeding patient factors. A supporting patient factor for deinstitutionalization is living with a partner. Behavioral variables found in literature are: violence, risk to self, substance abuse, personal care functioning, and family relation (see Table 2 for references). A higher score on violence, risk to self, substance abuse, dependence on others for personal care functioning, and non-compliance to medication are impeding factors for the success of treating patients outside the clinic. A higher family acceptance is found to be a supporting factor for extramural care delivery. Finally, clinical variables mentioned in the literature that impede deinstitutionalization are: a higher number of previous admissions and a longer duration of hospitalization (see Table 2 for references).

Determination of patient profiles (cluster analysis and interviews)

Due to a lack of registration data, it was not possible to measure the variables 'economic poverty',

Table 2 Supporting and impeding patient factors regarding deinstitutionalization

Variables	References
Demographic variables	
physical impairments	D'Avanzo, Frattura,, Barbui, Civenti, & Saraceno, 1999; Fisher, Barreira, Geller, White, Lincoln, & Sudders, 2001; Nottestad & Linaker, 2001; Richards, Smith, Harvey, & Pantelis, 1997
economic poverty	Lin, Chen, Lin, Lee, Ko, & Li, 2010
homelessness	Lay, Lauber, & Rössler, 2006
a lower education level	D'Avanzo et al., 1999; Lay et al., 2006
(un)employment	Lelliott, Wing, & Clifford, 1994
living alone	Lay et al., 2006; Saarento, Kastrup, Lönnerberg, Gostas, Muus, Sandlund, Öiesvold, & Hansson, 1998
age	Aviram, Minsky, Smoyak, & Gubman-Riesser, 1995; D'Avanzo et al., 1999; Gastal, Andreoli, Quintana, Almeida Gameiro, Leite, & McGrath, 2000; Korkeila, Lehtinen, Tuori, & Helenius, 1998; Lin et al., 2010; Roick, Heider, Kilian, Matschinger, Toumi,, & Angermeyer, 2004; Saarento et al., 1998; Thornicraft, Gooch, & Dayson, 1992; Zilber, Hornik-Lurie, & Lerner, 2011
gender	Aviram et al., 1995; Fisher et al., 2001; Gastal et al., 2000; Honkonen, Karlsson, Koivisto, Stengård, & Salokangas, 2003; Korkeila et al., 1998; Lin et al., 2010; Rantanen, Koivisto, Salokangas, Helminen, Oja, Pirkola, Wahlbeck, & Joukamaa, 2009; Richards et al., 1997; Roick et al., 2004; Saarento et al., 1998; Schalock, Harper, & Genung, 1981; Thornicraft et al., 1992
living with a partner	Lelliot et al., 1994; Saarento et al., 1998
Behavioral variables	
violence	Aviram et al., 1995; D'Avanzo et al., 1999; Lelliot et al., 1994; Nottestad & Linaker, 2001; Richards et al., 1997; Zhang, Harvey, & Andrew, 2011
risk to self	Aviram et al., 1995; Bredski, Watson, Mountain, Clunie, & Lawrie, 2011; Richards et al., 1997
substance abuse	Fisher et al., 2001; Honkonen et al., 2003; Zhang et al., 2011
dependent on others for personal care functioning	Aviram et al., 1995
non-compliance to medication	Aviram et al., 1995; Fisher et al., 2001
family acceptance	Schalock et al., 1981
Clinical variables	
number of previous admissions	Honkonen et al., 2003; Korkeila et al., 1998; Roick et al., 2004; Thornicraft et al., 1992; Zhang et al., 2011; Zilber et al., 2011
hospitalization length	Aviram et al., 1995; Botha, Koen, Joska, Parker, Hering, & Oosthuizen, 2010; Bredski et al., 2011; Fisher et al., 2001; Gastal et al., 2000; Korkeila et al., 1998; Lin et al., 2010; Nordentoft, Pedersen, Pedersen, Blinkenberg, & Mortensen, 2012; Saarento et al., 1998; Valenti, Necozione, Busellu, Borrelli, Lepore, Madonna, Altobelli, Mattei, Torchio, Corrao, & Di Orio, 1997

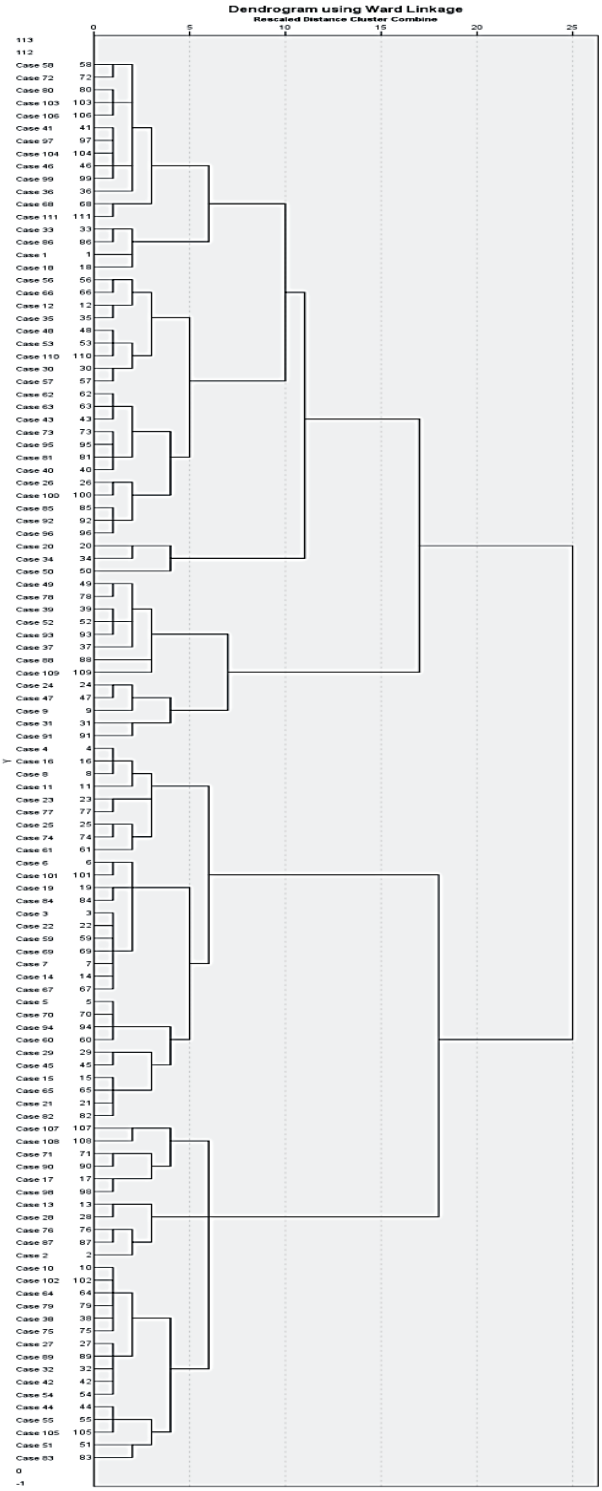

Figure 1 Dendogram

'education', 'compliance to medication' and 'social functioning'. It was also not possible to measure marital status (28.4% missing) and homelessness (60.6% missing) due to a high rate of missing values. These six variables were therefore removed, which resulted in twelve variables being used for the cluster analysis: physical impairments, violence, number of previous admissions, employment, risk to self, duration of hospitalization, living situation, substance abuse, gender, personal care functioning, age, and family relation.

To determine the amount of clusters, a dendogram and agglomeration schedule were used to visualize the largest change when adding a new cluster. Both the dendogram and agglomeration schedule were inconclusive about the exact amount of clusters. The dendogram (Figure 1) shows a large period for two ends to merge and a large period for four ends to merge. This points towards a 2-cluster solution or a 4-cluster solution. The agglomeration schedule (Table 3) displays the coefficient of each merge of cases. The change in coefficient determines which amount of clusters is most legitimate. The results in the agglomeration schedule show the largest change at a 2-cluster solution, though the change for the 3 and 4-cluster solution is still large.

To test the contribution of each of the variables a one way-ANOVA was undertaken. The results show that the variable 'risk to self' does not significantly contribute to a difference in clusters in a 2-, 3-, or 4-cluster solution. In a 2-cluster solution also 'family relation' showed no significant contribution.

Table 3 Agglomeration schedule

No. of clusters	Agglomeration last step	Coefficients this step	Change
2	1320.0	1171.2	148.8
3	1171.2	1069.4	101.8
4	1069.4	972.4	97.0
5	972.4	909.4	62.4
6	909.9	852.0	57.9

Because of the ambiguity a 2-, 3-, and 4-cluster solution were presented to professionals within GGzE to determine the most representative amount of clusters. Professionals within GGzE were asked to determine which cluster solution (2-, 3-, or 4-cluster solution) they thought most appropriate to represent patient groups with a psychotic disorder. They judged that the population was best represented by a 3-cluster solution (Table 4) which means 3 different patient profiles can be distinguished: crisis group (group 1), serious problems (group 2), and hospitalized elderly (group 3). Consecutively, these patient profiles were presented to professionals to determine precise characteristics.

Table 4 3-cluster solution clinical psychotic disorder population at GGzE

Variable	Group 1 (N=54)	Group 2 (N=27)	Group 3 (N=30)	F value	Sig.
Violent	0.59	1.63	0.83	12.99	0.000
Risk to self	0.24	0.04	0.23	1.71	0.187
Substance abuse	0.74	2.70	0.27	59.76	0.000
Physical impairments	0.83	0.85	1.77	7.57	0.001
Personal care functioning	1.39	2.26	2.73	19.01	0.000
Family relation	4.76	4.07	5.20	3.59	0.031
Admissions	1.35	1.33	1.03	4.58	0.012
Employment	0.22	0.00	0.00	7.92	0.001
Living alone	0.43	0.85	0.87	14.04	0.000
Gender	1.61	1.85	1.70	2.50	0.087
Age	42.05	41.15	50.75	9.62	0.000
Days of hospitalization	261.33	823.37	1060.33	48.81	0.000

Patient profile 1: Crisis group (N=54)

Variable analysis revealed that 48.6% of the patients of the psychotic disorder center of GGzE that are clinically admitted could be assigned to the 'crisis group'. Professionals at the operational level describe a member of this group as *'the slightly younger man, with few physical and psychological problems, who doesn't want to be hospitalized*'. At a tactical level the description was: *'this is an outpatient who has had some admissions and who sometimes needs support in the clinic for a couple of days*'. The interview results furthermore showed this to be the most suitable group for ambulant treatment. An initial action would be to reduce the number of hospitalization days for these patients. By reducing the admission time, the rate of circulation increases, which means less beds are necessary to fulfill patient demand for clinical treatment.

Patient profile 2: Serious problems (N=27)

The second group that was found in the quantitative analysis comprises 24.3% of the research population. On an operational level this group is characterized as follows: *'an aggressive young man, who does not want to be hospitalized and who exhibits abusive behaviour under the influence of alcohol'*. Managers at a tactical level describe this group as *'these are the people that need to be watched carefully. They tend to be dangerous, in many ways, for themselves and for others'*. The interviewees state that these patients benefit from clinical treatment and are not suitable candidates for deinstitutionalization. Otherwise, it is predicted that they will cause problems in society and be harmful to public safety.

Patient profile 3: Hospitalized elderly (N=30)

The last profile, hospitalized elderly, comprises 27% of the clinically admitted patients at the

psychotic disorder center of GGzE. This group is described as *'more physically disabled, elderly, and more institutionalized'*. Another description offered in the interviews on an operational level is: *'the elderly man with a physical disability who cannot manage on his own in the home'*. Interviewees at the tactical level mention that for this group: *'the possibilities to handle life in a practical way are fiercely reduced'*. It is also called: *'the group that should be taken care of'*. According to the interviewees, bed reduction for this group would be plausible. These patients oftentimes only need homecare and nursing care, rather than specialized psychiatric care. Different treatment programs seem plausible for this group, separating residential care from (mental) healthcare.

Interview results on the application of the audience segmentation technique

The interview results show that the value of audience segmentation as a technique to gain more knowledge about the patient population is recognized on an operational and tactical level. On a strategic level, the interview results are equally positive with regard to the usefulness of the method. In general, a shift from thinking from a supply perspective (*'at this time we determine supply based on what we more or less think is necessary for certain groups, based on usage of supply'*), to a more patient oriented approach (*'audience segmentation could be used to think of which patient factors you have to take into account when determining supply'*) was observed. It was also stated that there are other factors, aside from demand or patient related factors that should be taken into account when determining mental healthcare supply and making policy decisions that affect patients' care, such as financial issues, political developments, and other organizational aspects. According to the interviewee, patient demand should however be the central focus when developing mental healthcare supply.

Discussion

The aim of this article is to provide mental healthcare organizations with a tool that enables them to gain a better understanding of the demand of their patient population in support of demand oriented decision making. This study showed that it was possible, with the help of audience segmentation, to develop distinct patient profiles for a mental healthcare population which provided information about specific aspects of their care needs. In this case study, the need for intramural treatment versus ambulant alternatives was examined.

Audience segmentation to reveal homogeneous subgroups within the clinical population of the psychotic disorder center at GGzE led to statistically segmented groups of patients, or in other words: patient profiles. The statistical outcome of the cluster analysis was inconclusive with regard to the number of clusters. This may have been a result of the difference between the groups being smaller than expected or that there was still a lot of variety within the subgroups. Professional judgment (by means of interviews) was therefore useful to determine the right amount of clusters. Although the statistical analysis failed to provide a conclusive number of profiles, it was still possible to identify

different subgroups within the clinically admitted patient population at the psychotic disorder center of GGzE. Complemented with qualitative analysis, distinct profiles could be determined which provided valuable information on the issue of clinical bed reduction within the center. This would imply that audience segmentation can assist in acquiring knowledge about the characteristics of a patient population and aid the development of patient profiles in mental healthcare.

The study also revealed that audience segmentation has the potential to provide knowledge about possible differences in mental healthcare needs within a population. This was deduced from the finding in this study that the characteristics of groups of patients led to a different assessment of the possibility of extramural treatment. The results also show that current supply does not always match what is most suitable to the patient and his need for care. In this case, a number of patients from the psychotic disorder center is currently being treated clinically while their patient profile points to ambulatory treatment actually being more suitable. This could lead to a different policy being adopted with regard to those patients.

The study shows that audience segmentation contributes to a change in the way of thinking from supply oriented to more demand or patient oriented care. This encompasses looking at the information on specific patient profiles to understand their needs. In this way, patient profiles provide knowledge about the demand of patients so that the right amount and form of care can be given. It should be noted however, that mental healthcare demand encompasses more domains than the one that was investigated in this specific case study at GGzE: clinical versus ambulatory care.

Furthermore, in this case study only variables were used, based on what was found in the literature, about which data could be found in the registration systems of the organization. This does not necessarily provide a complete picture of the demand for clinical or ambulatory care. This greatly limited the number of patients that could be included in the statistical analysis. Another limiting factor was the decision to define 'mental healthcare demand' as 'service in use', which neglects the fact that there may be a latent demand for care, which is not considered in this case. However, service in use is generally considered the best 'measure' of mental healthcare demand. Using 'service in use' as an operationalization for mental healthcare demand also advances the use of audience segmentation as an applicable tool.

Finally, patients' own view of their need for care was not measured, which means only a normative need was identified. Regardless of these limitations, the audience segmentation technique can provide mental healthcare providers with useful information that can help to determine whether supply needs to be altered to meet the needs of their patients, by defining the healthcare needs of a specific patient population.

Conclusions

The technique of audience segmentation was applied in a single case study at a mental healthcare provider in the Netherlands. This first exploration revealed that audience segmentation can be

used as an instrument for market orientation research for mental healthcare organizations. It is thought that the technique can also be used to decide other policy issues than the one tackled in this case study, by adopting different variables appropriate to the context. The technique had not before been applied to the field of mental healthcare in the Netherlands, yet the results suggest it could prove a valuable instrument in gaining knowledge about the needs of patients in mental healthcare. Follow up research should be aimed at testing the technique in different target populations within the (mental) healthcare sector, using different variables to develop patient profiles. This may lead to the development of a better audience segmentation technique specially tailored to mental healthcare providers. From the results of this study we conclude that audience segmentation can be used to gain more in-depth knowledge about mental healthcare needs, so helping healthcare providers to make sounder demand oriented decisions about treatment programs for specific groups of patients.

References

Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior, 36*(1), 1-10.

Aviram, U., Minsky, S., Smoyak, S. A., & Gubman-Riesser, G. D. (1995). Discharge-ready patients who remain hospitalized: a re-emerging problem for mental health services. *Psychiatric Quarterly, 66*(1), 63-85.

Bhuian, S. N., & Abdul-Gader, A. (1997). Market orientation in the hospital industry. *Marketing Health Services, 17*(4), 36-45.

Bierbooms, J. J. P. A., Bongers, I. M. B., & Oers, H. A. M. van. (2012). Strategic market orientation in mental healthcare: a knowledge synthesis. *International Journal of Healthcare Management, 5*(3), 141-153.

Bilsen, P. M. A. van, Hamers, J. P. H., Groot, W., & Spreeuwenberg, C. (2004). Welke zorg vragen ouderen. Een inventarisatie. *Tijdschrift voor Gezondheidswetenschappen, 82*(4), 221-228.

Boeije, H. (2010). *Analysis in qualitative research.* Sage publications Ltd.

Boslaugh, S. E., Kreuter, M. W., Nicholson, R. A., & Naleid, K. (2004). Comparing demographic, health status and psychosocial strategies of audience segmentation to promote physical activity. *Health Education Research, 20*(4), 430-438.

Botha, U. A., Koen, L., Joska, J. A., Parker, J. S., Hering, L. M., & Oosthuizen, P. P. (2010). The revolving door phenomenon in psychiatry: comparing low-frequency and high-frequency users of psychiatric inpatient services in a developing country. *Social Psychiatry and Psychiatric Epidemiology, 45*(4), 461-468.

Bredski, J., Watson, A., Mountain, D. A., Clunie, F., & Lawrie, S. M. (2011). The prediction of discharge from in-patient psychiatric rehabilitation: a case-control study. *BMC Psychiatry, 11,* [ARTN 149] doi: 10.1186/1471-244X-11-149.

Burns, R. P., & Burns, R. A. (2008). *Business research methods and statistics using SPSS.* London, England: Sage publications Ltd.

Campen, C. van. (2009). *Profielen van vragers naar AWBZ-GGZ.* The Hague, The Netherlands: Sociaal en Cultureel Planbureau (the Netherlands Institute for Social Research).

D'Avanzo, B., Frattura, L., Barbui, C., Civenti, G., & Saraceno, B. (1999). The Qualyop Project. 1: Monitoring the dismantlement of Italian public psychiatric hospitals. Characteristics of patients scheduled for discharge. *The International Journal of Social Psychiatry, 45*(2), 79-92.

Deshpandé, R., Farley, J. U., & Webster, F. E. Jr. (1993). Corporate culture, customer orientation, and innovativeness in Japanese firms: A quadrad analysis. *Journal of Marketing, 57*, 23-27.

Dutch Association of Health and Addiction Care. (2009). *Sector report 2010: Valued Care.* Amersfoort, the Netherlands.

Fisher, W. H., Barreira, P. J., Geller, J. L., White, A. W., Lincoln, A. K., & Sudders, M. (2001). Long-Stay Patients in State Psychiatric Hospitals at the End of the 20th Century. *Psychiatric Services, 52*(8), 1051-1056.

Gastal, F. L., Andreoli, S.B., Quintana, M. I., Almeida Gameiro, M., Leite, S. O., & McGrath, J. (2000). Predicting the revolving door phenomenon among patients with schizophrenic, affective disorders and non-organic psychoses. *Revista de Saude Publica, 34*, 280-285.

Gehrt, K. C., & Pinto, M. B. (1990). An exploration of the applicability of situational segmentation in the health care market. *Health Marketing Quarterly 7*(1-2):115-130.

Grunig, J. (1989). Publics, audiences, and market segments: Segmentation principles for campaigns. In C. Salmon (Ed.), *Information campaigns: Balancing social values and social change* (pp. 199-228). Newbury Park, CA: Sage.

Have, M. ten, Vollebergh, W., Bijl, R. V., & Graaf, R. de (2001). Predictors of incident care service utilisation for mental health problems in the Dutch general population. *Social Psychiatry and Psychiatric Epidemiology, 36*, 141-149.

Honkonen, T., Karlsson, H., Koivisto, A. M., Stengård, E., & Salokangas, R. K. R. (2003). Schizophrenic patients in different treatment settings during the era of deinstitutionalization: three-year follow-up of three discharge cohorts in Finland. *Australian and New Zealand Journal of Psychiatry, 37*(2), 160-168.

Kohli, A. K., & Jaworski, B. J. (1993). Market Orientation: The Construct, Research Propositions, and Managerial Implications. *Journal of Marketing, 54*(2), 1-18.

Korkeila, J. A., Lehtinen, V., Tuori, T., & Helenius, H. (1998). Frequently hospitalised psychiatric patients: a study of predictive factors. *Social Psychiatry and Psychiatric Epidemiology, 33*(11), 528-534.

Kotler, P. (1977). From sales obsession to marketing effectiveness. *Harvard Business Review, 55*, 67-75.

Kotler, P., & Clarke, R. N. (1987). *Marketing for health care organizations.* Englewood Cliffs, New Jersey: Prentice-Hall.

Lay, B., Lauber, C., & Rössler, W. (2006). Prediction of in-patients use in first-admitted patients with psychosis. *European Psychiatry, 21*(6), 401–409.

Lefebvre, R. C., & Flora, J. A. (1988). Social marketing and public health intervention. *Health Education Quarterly, 15*(3), 299-315.

Lelliott, P., Wing, J., & Clifford, P.A. (1994). A national audit of new long-stay psychiatric patients. I: Method and description of the cohort. *The British Journal of Psychiatry, 165*(2), 160-169.

Lin, C. H., Chen, W. L., Lin, C. M., Lee, M. D., Ko, M. C., & Li, C. Y. (2010). Predictors of psychiatric readmissions in the short- and long-term: a population-based study in Taiwan. *Clinics, 65*(5), 481-489.

Moss, H. B., Kirby, S. D., & Donodeo, F. (2009). Characterizing and reaching high-risk drinkers using audience segmentation. *Alcoholism: Clinical and Experimental Research, 33*(8), 1336-1345.

Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing, 54*(4), 20-34.

Nordentoft, M., Pedersen, M. G., Pedersen, C. B., Blinkenberg, S., & Mortensen, P. B. (2012). The new asylums in the community: Severely ill psychiatric patients living in psychiatric supported housing facilities. A Danish register-based study of prognostic factors, use of psychiatric services, and mortality. *Social Psychiatry and Psychiatric Epidemiology, 47*(8), 1251-1261.

Nottestad, J. A., & Linaker, O. M. (2001). Self-injurious behaviour before and after deinstitutionalization. *Journal of Intellectual Disability Research, 45*(2), 121-129.

Porter, M. E. (2008). The five competitive forces that shape strategy. *Harvard Business Review, 86*(1), 78-93.

Post, D., & Stokx, L. J. (1997). *Volksgezondheid Toekomst Verkenning 1997 VI Zorgbehoefte en zorggebruik.* Bilthoven, the Netherlands: Rijksinstituut voor Volksgezondheid en Milieu (National Institute for Public Health and the Environment).

Rantanen, H., Koivisto, A. M., Salokangas, R., Helminen, M., Oja, H., Pirkola, S., Wahlbeck, K., & Joukamaa, M. (2009). Five-year mortality of Finnish schizophrenia patients in the era of deinstitutionalization. *Social Psychiatry and Psychiatric Epidemiology, 44*(2), 135-142.

Richards, J., Smith, D. J., Harvey, C. A., & Pantelis, C. (1997). Characteristics of the new long-stay population in an inner Melbourne acute psychiatric hospital. *The Australian and New Zealand Journal of Psychiatry, 31*(4), 488-95.

Roick, C., Heider, D., Kilian, R., Matschinger, H., Toumi, M., & Angermeyer, M. C. (2004). Factors contributing to frequent use of psychiatric inpatient services by schizophrenia patients. *Social Psychiatry and Psychiatric Epidemiology, 39*(9), 744-751.

Saarento, O., Kastrup, M., Lönnerberg, O., Gostas, G., Muus, S., Sandlund, M., Öiesvold, T., & Hansson, L. (1998). The Nordic Comparative Study on Sectorized Psychiatry: patients who use only psychiatric in-patient care in comprehensive community-based services - a 1-year follow-up study. *Acta Psychiatrica Scandinavica, 98*(2), 98-104.

Schalock, R. L., Harper, R. S., & Genung, T. (1981). Community integration of mentally retarded adults: community placement and program success. *American Journal of Mental Deficiency, 85*(5), 478-88.

Sijbrandij, M., Jonker, I., & Wolf, J. (2008). *Cliëntprofielen van vrouwen met geweldservaringen in de vrouwenopvang.* Nijmegen, the Netherlands: UMC St. Radboud.

Slater, M. D. (1996). Theory and method in health audience segmentation. *Journal of Health Communication, 1*(3), 267-83.

Stone, T. R., Warren, W. E., & Stevens, R. E. (1990). Segmenting the mental health care market. *Journal of Healthcare Marketing, 10*(1), 65-69.

Thornicraft, G., Gooch, C., & Dayson, D. (1992). The TAPS project. 17: Readmission to hospital for long term psychiatric patients after discharge to the community. *British Medical Journal, 305*, 996-998.

Valenti, M., Necozione, S., Busellu, G., Borrelli, G., Lepore, A. R., Madonna, R., Altobelli, E., Mattei, A., Torchio, P., Corrao, G., & Di Orio, F. (1997). Mortality in psychiatric hospital patients: a cohort analysis of prognostic factors. *International Journal of Epidemiology, 26*(6), 1227-35.

Walsh, D. C., Rudd, R. E., Moeykens, B. A., & Moloney, T. W. (1993). Social marketing for public health. *Health Affairs, 12*(2), 104-119.

Westert, G. P., & Smits, J. P. (2007). Onderzoek naar zorggebruik en de toegankelijkheid van de gezondheidszorg. In T. Plogh (ed.). *Handboek gezondheidszorgonderzoek*. Houten, the Netherlands: Bohn Stafleu van Loghum.

Wits, E., Rodenburg, G., & Knibbe, R. (2007). Richtlijn voor het opstellen van cliëntprofielen in de verslavingszorg. Amersfoort, the Netherlands: Resultaten Scoren (Results Count).

Wolff, L. S., Masset, H. A., Maibach, E. W., Weber, D., Hassmiller, S., & Mockenhaupt, R. E. (2010). Validating a health consumer segmentation model: behavioral and attitudinal differences in disease prevention-related practices. *Journal of Health Communication: International Perspectives, 15*(2), 167-188.

Zhang, J., Harvey, C., & Andrew, C. (2011). Factors associated with length of stay and the risk of readmission in an acute psychiatric inpatient facility: a retrospective study. *Australian and New Zealand Journal of Psychiatry, 45*(7), 578-85.

Zilber, N., Hornik-Lurie, T., & Lerner, Y. (2011). Predictors of early psychiatric rehospitalization: a national case register study. *Israel Journal of Psychiatry and Related Sciences, 48*(1), 49-53.

Chapter 4

Stakeholders in mental healthcare

Resubmitted after revision at BMC Health Services Research as:
Bierbooms JJPA, Van Oers JAM, Rijkers JPA, Bongers IMB. The application of a comprehensive model of stakeholder management in mental healthcare.

Abstract

Background. Competition in the mental healthcare sector is increasing and relationships with key stakeholders, such as financiers, referring practitioners and healthcare chain partners, become more important, requiring better stakeholder management within mental healthcare organizations. Stakeholder management is, however, not yet incorporated into the standard practice of most mental healthcare providers. In this study we assessed the applicability of a comprehensive model for stakeholder management in mental healthcare organizations.

Methods. The assessment was performed in two research parts: 1. the steps described in the model (stakeholder identification, identification of stakeholder expectations, determination of performance gaps, determination of stakeholder salience) were executed in a single case study at a mental healthcare organization in the Netherlands, and 2. a process and effect evaluation was done by keeping a log to register supporting and impeding factors with regard to the applicability of the model (process). In addition, interviews were held with management and the board of directors to evaluate the effectiveness of the model with a view to stakeholder management.

Results. The stakeholder analysis resulted in the identification of 8 stakeholder groups. Different stakeholder expectations were identified for each of these groups. The analysis on performance gaps revealed that stakeholders generally find the collaboration with a mental healthcare provider 'sufficient'. Finally a prioritization was made among these stakeholder groups which showed that 5 stakeholder groups are seen as 'definite' stakeholders by the organization. Regarding the practical applicability, an important finding is the time-consuming nature of the application of the model. Incomplete contact information impedes the performance of a complete stakeholder analysis. The effectiveness of the model would likely be improved if each of the steps is also performed from the perspective of the stakeholders. The prioritization of stakeholder demands is seen as very valuable in order to create different communication strategies for each stakeholder group.

Conclusions. Provided that the model is properly adapted for the specific field, the analysis can provide more knowledge on stakeholders and can help integrate stakeholder management as a comprehensive process in policy planning. Further research in other mental healthcare organizations will improve the general applicability of the model.

Key words. Mental healthcare, Stakeholder management, Stakeholder analysis.

Background

Context

The complexity and dynamics of the Dutch healthcare sector have undergone major changes in the last decades; these include increasing pressure on budgets, and market forces requiring transformation from a social service organization to a competitive market-oriented organization no longer entirely financially supported by the government. Within such complexity, healthcare organizations have become increasingly dependent on a diverse number of stakeholder groups (e.g. government, referring practitioners, patients, and financiers), all of which have different roles and expectations [1-3].

For example, because of the legal requirement to negotiate contractual agreements with financiers, the relations with financiers can affect financial budgets and, subsequently, affect the potential for development and growth of a mental healthcare provider. In some cases agreement with financiers is not achieved; this implies that patients insured with financiers who have no financial agreements, receive no financial compensation for their healthcare received. However, with the freedom of choice available in the current mental healthcare sector, this allows and encourages patients to switch to another care provider.

Another example concerns the relationship with referring practitioners. In the Dutch mental healthcare system a referral from a general practitioner (GP) or other provider of primary healthcare is (generally) mandatory to receive care in secondary (mental) healthcare. However, as patients and their families are becoming more aware of their rights, more critical and can choose between multiple care providers, the referring practitioners need comprehensive information on the treatment programs of mental healthcare providers in order to provide patients with adequate and accurate referral. The quality of the relationship with key stakeholders can make all the difference between success and failure in attracting and retaining these patients.

In practice, because Dutch mental healthcare providers rarely analyze their relationship with stakeholders, it remains unclear to what extent these stakeholders influence organizational objectives and results. From this viewpoint, we assume that stakeholder management is not yet a focal issue in most mental healthcare organizations.

Theory on stakeholder management

The purpose of stakeholder management is to form, monitor and maintain constructive relationships with the organization's stakeholders, i.e. to understand their relative importance, to identify new or upcoming stakeholders, and to decide which strategies are important in building relationships with important stakeholders [4,5]. This requires inter-organizational arrangements and cooperation with multiple stakeholders, implying that understanding of the vision and objectives of the organization by stakeholders is of vital importance [6,7]. Stakeholder management can contribute to a better mutual understanding of the interests of the organizations and its stakeholders.

Although the importance of stakeholder management is recognized by most healthcare organizations, there are differences in how this is applied in practice [8]. A difficulty often encountered is the lack of information regarding what is needed to match organizational decisions with the expectations of important stakeholders, and the relative extent to which these stakeholders can influence the organization's objectives [2,5]. This information can be collected by means of a stakeholder analysis [2].

Although several practical methods are available that (separately) describe the individual steps of stakeholder management [1,2,8,9], no comprehensive method for stakeholder management is available that has both a theoretical and practical basis. However, the comprehensive stakeholder management process model developed by Preble is an excellent theoretical concept [10] (Fig. 1), as it encompasses the different aspects of stakeholder management that are proposed separately by others [1,2,8,9]. Preble's [10] model describes four steps of stakeholder analysis, aiming at identifying the multiple stakeholders active in the mental healthcare sector, mapping their main expectations, determining performance gaps, and prioritizing different stakeholder demands (Fig. 1; Steps 1-4). In addition, the model incorporates two steps that cover the transition from the actual stakeholder analysis to the organizational responses needed to bring stakeholder management into the practice of mental healthcare organizations (Fig. 1; Steps 5 and 6). However, Preble's [10] model is mainly theoretical and needs to be more specified to be applicable for healthcare (or any other) organizations.

Preble [10] states that there is a need for more knowledge on the practical implementation of stakeholder management within organizations. This practical implementation can be found by operationalization of the steps in the model using additional theory on stakeholder management and stakeholder analysis [10]. The analysis phase comprises the first four steps of the comprehensive stakeholder management process model [10] (Fig. 1), which are also described separately by others [1,2,8,9].

First, the stakeholders must be identified and classified into specific groups in order to manage stakeholders with different interests in appropriate ways [1,2,8,12-16]. Blair and Fottler [1] use the terms 'internal, external and interface stakeholders' to initially classify stakeholder groups. Following the division between internal, external and interface stakeholders, other authors describe the importance of classifying stakeholders into separate homogeneous groups, to be able to manage different stakeholders in the most appropriate ways [1,2,8,12-16]. The first step, identification of stakeholders, entails collecting up-to-date information about each stakeholder, i.e. contact information (e.g. specific names of affiliations, addresses, e-mail), the frequency of consultation, and characteristics of the stakeholders. Subsequently, classification criteria need to be developed for the specific field of mental healthcare in order to classify them into homogeneous groups [8].

Following the identification of stakeholders and stakeholder groups, organizations must learn how different expectations and competing stakeholder demands can be managed [17]; for this, knowledge on the general nature of stakeholder expectations is required [17]. To perform

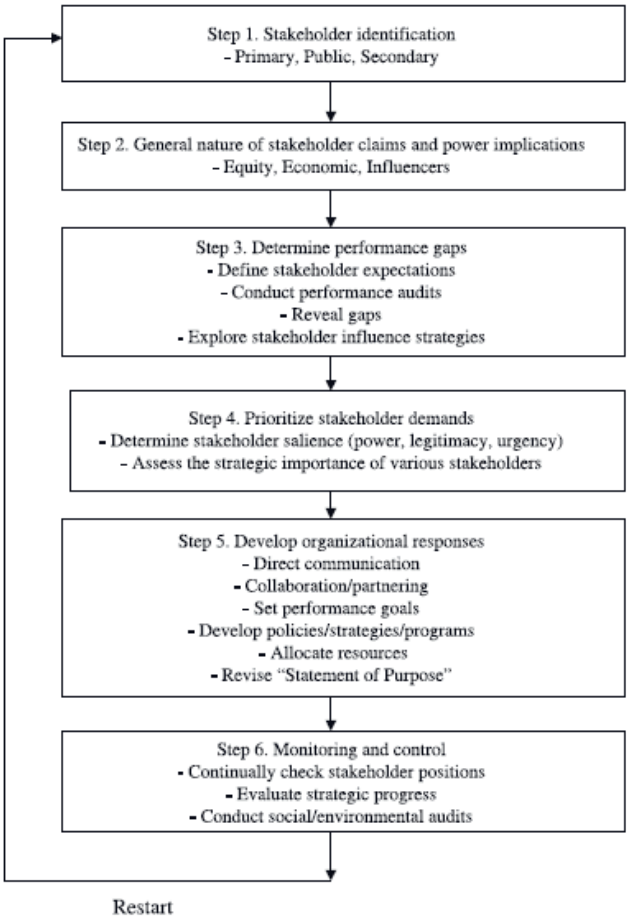

Figure 1 Comprehensive Stakeholder Management Process Model [10] (© 2005, John Wiley and Sons)

this second step, Preble's [10] classification of stakeholders based on equity, influencing and economic stakeholders is not the most suitable for mental healthcare organizations, because this specific type of organization is not represented in Preble's classification. Determination of stakeholder expectations can be realized based on assumptions regarding the logical classification of stakeholder groups into domains of accountability, as provided in the framework of Dansky and Gamm [9]. Because this accountability framework specifically focuses on healthcare organizations [9] it can be used to complete this step. The framework helps elucidate the different expectations of stakeholders and their incentives, and addresses the concerns of stakeholder groups based on four domains of accountability: political, commercial, community, and clinical [9]. Stakeholders within the *political* domain are organizations that develop policy and regulations in (mental)

healthcare; *commercial* accountability focuses on value creation and financial benefits; *community* accountability encompasses organizations in the field of public health and wellbeing; and the *clinical* accountability domain focuses on the quality, effects and efficiency of the delivery of (mental) healthcare services [9].

The next step is to determine performance gaps based on how organizational objectives and strategies differ from the identified expectations [18-20] and form potential threats [12]. These gaps can be identified based on scores on the familiarity of stakeholders with the objectives of an organization, and the perceived fit of stakeholders with these objectives [17,18]. No literature is available on the assessment of 'performance gaps' in the context of mental healthcare; however, the general interpretation of performance gaps by other authors [10,17-19] provides guidelines to develop a contextualized questionnaire or interview schedule to perform this step. This should result in identification of the gap between organizational objectives and the perception that stakeholders have of the general realization of these objectives [10,17-19].

Subsequently, priority setting is an important action in stakeholder analysis; this entails determining which stakeholder demands should be given priority when formulating organizational responses [2,7,8,15,21]. For this step of the analysis, Mitchell et al. [8] provide a model to determine *stakeholder salience*. This entails classifying stakeholders into 7 groups: dormant, discretionary, demanding, dominant, dangerous, dependent, and definitive stakeholders. This classification can be achieved by determining the power, legitimacy and urgency of each stakeholder. Knowing the salience level of different stakeholders provides the organization with guidelines to develop responses to stakeholder claims. The questionnaire on stakeholder salience designed by Bravo [22] provides a practical method for a mental healthcare organization to perform this step of the analysis.

Research questions

The overall aim of this study is to gain knowledge on the applicability of stakeholder analysis, according to the model of Preble [10], for mental healthcare providers. For this purpose, the model was applied at a specific mental healthcare provider, and the process and effects of this application were evaluated. The following research questions were formulated:

What results are yielded when stakeholder analysis based on the model of Preble [10] is applied in the practice of a mental healthcare provider?

Is the stakeholder management process model of Preble [10] a useful tool for mental healthcare providers to perform stakeholder analysis?

Methods

Research design

To gain insight into the applicability and the results yielded when applying stakeholder analysis, the successive steps of the model were applied in a single case study at a mental healthcare

organization in the southern part of the Netherlands: *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE).

GGzE has a working area of approximately 527,000 inhabitants and treats about 16,000 patients per year. GGzE cooperates with several healthcare chain partners in order to provide the best care possible for patients with complex psychiatric problems in and around the city of Eindhoven.

A case study is an appropriate research design because of the aim to understand a complex and dynamic setting, in this case a mental healthcare organization [23,24], by asking 'how' or 'why' questions [23,25].

Because of the duality within this research project, the present study consists of two parts. In Part 1, Steps 1-4 of the stakeholder management process model [10] (i.e. the actual analysis) were applied at GGzE in order to answer the first research question. Recommendations for Steps 5 and 6 were extracted from the results of this analysis.

Part 2 assesses whether the model is applicable in the practice of mental healthcare (second research question) by conducting a process and effect evaluation.

The stakeholder analysis was conducted at the division Adult and Geriatric Psychiatry at GGzE. This division was selected for the analysis because, during the study, GGzE was preparing a stakeholder meeting with external stakeholders of these clusters. Although most of the stakeholders involved in this division are also stakeholders of other divisions within GGzE, specific stakeholders of other divisions (i.e. Child & Adolescent Psychiatry, and Forensic Psychiatry) were not included in the present case study.

Stakeholder analysis (Part 1)

Step 1. For the first step of the stakeholder analysis (stakeholder identification) document and interview data were used. An existing list of stakeholders (based on GGzE's 2011 Annual Report) was consulted and complemented with interview data from semi-structured interviews held with managers within the division. Managers were selected for the interviews by means of purposive sampling [26]. The interviews (n=6) were recorded, transcribed and systematically analyzed using open, axial and selective coding [27].

Step 2. To determine the underlying nature of stakeholder expectations, a literature study was used. Articles were selected that contributed to the subject from ABI/inform. The search terms used were 'stakeholder accountability' and 'stakeholder incentives'. Then, forward and backward snowballing was used to reveal additional relevant literature. The underlying interests found in the literature were then attributed to the specific stakeholder groups of GGzE, based on the interpretation of the researcher; attribution was then verified by a member of the managing board and a staff member of GGzE.

Step 3. Performance gaps were measured both at stakeholder and organizational level. To determine performance gaps, the stakeholders previously invited to GGzE's stakeholder conference (n=47) were asked to fill out a questionnaire. Because no validated questionnaire was available, the

questionnaire was developed based on definitions of performance gaps reported by others [10,19]. The questionnaire was examined by one of the co-authors and a board member at GGzE. To deepen the results from the questionnaires, the managers within the division (n=6) were interviewed about the performance gaps they perceive at the organizational level. The questions were incorporated in the interviews in Step 1.

Step 4. The prioritization of stakeholder groups (stakeholder salience) was performed using quantitative data from a questionnaire among managers of different hierarchal layers within GGzE (n=28). The managers were selected by purposive sampling [26] to obtain a good representation of stakeholder salience of every stakeholder group. The questionnaire is an adapted version of the validated questionnaire of Bravo [22]; it was translated into Dutch, the identified stakeholder groups (Step 1) were used as answering options, and 'organization' was changed to 'GGzE'. The results were analyzed by measuring the power, legitimacy and urgency [8] of each stakeholder group. The variables were tested for reliability and then scored using the following scales: 1-3.5 = no score on the variable; 3.5-4.5 = neutral; and 4.5- 7 = score on the variable.

Assessment of applicability (Part 2)

The second research question concerned the applicability of the model in the practice of a mental healthcare provider; for this, a process and effect evaluation was made focusing on the extent to which the intended goal from the stakeholder analysis was achieved in practice. In this assessment we evaluated the process of applying the different steps, the results of the stakeholder analysis, and the outcomes found on the applicability of the model.

To execute the steps of the process and effect evaluation, different data sources were used. Information on the process of applying the different steps during the analysis was collected by keeping a log in which Steps 1-4 of Preble's model [10] were monitored for success and failure factors. The log was kept by the third author of this paper (a Master's student of Organizational Studies) who was finishing his Master's education at that time. To evaluate the expected effects of the model with a view to improving stakeholder relations, semi-structured interviews were held with management and the board of directors. The interviewees were selected based on their involvement with stakeholder management in the organization, and their responsibility to monitor processes and effects related to this subject. The interviews were recorded, transcribed and analyzed by open, axial and selective coding [27].

Results

The results of the study are reported below in two parts. First, specific results of the stakeholder analysis at GGzE are provided; second, results are presented for the assessment of the applicability of Steps 1-4 of the comprehensive stakeholder management model [10] for mental healthcare providers.

Stakeholder identification (Step 1)

Prior to the present study, relevant stakeholders were identified and published in GGzE's 2011 Annual Report, classified into the following 8 groups:

1. Patient organizations (12): associations for patients and, specifically, for elderly; board of patient representatives at GGzE.
2. Financiers (20): health insurance companies; national and local government; subsidy suppliers.
3. Healthcare organizations (63): other mental healthcare institutions; regional healthcare organizations; child and adolescent care; primary healthcare; addiction care; home care services.
4. Non-governmental organizations (24): social housing corporations; organizations for work; daytime organizations for social work.
5. Institutions in the area of research and development (18): academies and universities; research institutions; networks of expertise.
6. Institutions in the area of safety (2): regional police department; regional fire department.
7. Government (3): national and local government; national inspection on the quality of care.
8. Inspection services (1): national inspection on the quality of care.

Based on this list, a total of 125 stakeholders were identified by the division Adult and Geriatric Psychiatry. Because some of the stakeholders appeared in more than one group, the total of the subgroups is greater than the total of the single stakeholders.

Underlying nature of stakeholder expectations (Step 2)

The accountability framework of Dansky and Gamm [9] was the most suitable classification to determine the underlying nature of the expectations of GGzE's stakeholders, because their domains correspond with the practice of mental healthcare providers.

The identification of stakeholders in the case study at GGzE led to 8 stakeholder groups; these were linked to the four domains in the accountability framework [9] as shown in Table 1. This revealed 3 stakeholder groups with a *clinical* accountability: patient organizations, healthcare organizations, and non-governmental organizations; these organizations focus on the quality of care, the effects of treatments, and patient satisfaction. Three groups of stakeholders were classified as *political* stakeholders: financiers, government, and inspection services. Stakeholders in these groups have a strategic interest in GGzE's services. For example, financiers need to guarantee that the services are delivered according to the purchase agreement they have with GGzE. Government and inspection services have a political responsibility for health and welfare on a national and regional level. Stakeholders with a *community* accountability are organizations with an interest in public health and welfare, safety, and social coherence. Three stakeholder groups met these criteria: institutions in the area of research and development, and institutions in the area of safety, government, and inspection services. Financiers are considered stakeholder groups with a *commercial* accountability; e.g. health insurance companies have become private organizations and need to attract clients for a viable business.

Table 1 Nature of stakeholder expectations

Stakeholder group	Domain(s) of accountability
Patient organizations	Clinical
Financiers	Political and commercial
Healthcare organizations	Clinical
Non-governmental organizations	Clinical
Institutions in the area of research and development	Community
Institutions in the area of safety	Community
Government	Political and community
Inspection services	Political and community

Performance gaps (Step 3)

Performance gaps were measured at organizational (GGzE) and stakeholder level. First, the objectives and associated values of GGzE were compared with the perception of managers on the expectations of stakeholders (Table 2). Second, stakeholders were asked about their perception with regard to the performance of GGzE (Table 3). Performance gaps are measured for the 8 stakeholder groups that existed prior to the current analysis.

Table 2 Perceived performance gaps on organizational level

Stakeholder	Perceived performance expectation	Perceived performance gap
Partner organization for nursing and care	Focus of the stakeholder is on quality of life of the patients, the delivery of care has lower priority	Does not fit the objective of GGzE to deliver the best care possible for patients. GGzE expects intensive supervision and high quality care.
General practitioners (GP)	GP's indicate to perceive relatively long lines between them and GGzE	Government cuts on social psychiatric nurses at the medical practices resulted in more bureaucracy in the relation between the GP's and GGzE. However, GP's are perceived as very important for GGzE because they bridge the gap between primary and secondary care.
Local government	Centre managers perceive local government to focus on the participation of patients in the community	GGzE focuses on individual patients and the specific care they need
Assessor	Assessor determines the amount of care needed, which results in the financing of this care	Sometimes this indication is not congruent with actual resources needed to deliver care at GGzE
Medicine suppliers	Aim of suppliers is to sell medicines and earn money	GGzE objective is to get high quality medicines and therefore uses the pharmacist as a buffer between these interests
UWV	UWV sometimes indicates that a patient is ready for work	From the perspective of GGzE patients sometimes need prudence with returning to work, goal is the recovery of the patient
Housing corporations	Housing associations focus on the interests of the neighborhood	GGzE focuses on the patient when patients are relocated

Managers of GGzE's Adult and Geriatric division consider that the focus of stakeholders differs from their own. GGzE focuses on individual patients, whereas stakeholders also have an interest in the public sphere (e.g. local government, housing corporations). The performance gap between GGzE and the Dept. of Social Insurance (in Dutch, *UWV*) is of a similar nature, GGzE protects individual patient needs whereas the main goal of the Dept. of Social Insurance is to get people (with different backgrounds) back to work. Another problem lies within the organization of care processes. Stakeholders (e.g. GPs or other referring partners) have long waiting lists, which can result in a patient not being properly referred. The connection between primary and secondary care is, however, an important determination of success for GGzE. Finally, the tension between the quality of care and cost efficacy is visible in the relation between GGzE and stakeholders with a financial interest (e.g. assessors, medication suppliers).

Stakeholders invited to GGzE's annual stakeholder meeting (n=47) were asked to fill in a questionnaire about the perceived performance of GGzE (Table 3). The response to this question (40%) did not cover all stakeholder groups, and not all stakeholder groups were represented at the stakeholder meeting. The response (34%) covered healthcare organizations (38%), non-governmental organizations (33%), and institutions in the area of research and development (50%). Healthcare organizations are generally familiar with the mission and vision of GGzE; they experience GGzE as a collaborative partner that is rated as 'sufficient' (7.0). Non-governmental organizations score relatively high with regard to perceived performance of GGzE. Institutions in the area of research and development score relatively low; this may be related to the different role, with regard to dependencies and responsibilities, these organizations have as a stakeholder.

Table 3 Perceived performance gaps on a stakeholder level

Stakeholder group (N)	Response rate (%)	Familiarity of the stakeholder with the mission of GGzE (scale 1-5)	Familiarity of the stakeholder with the vision of GGzE (scale 1-5)	Experiences GGzE as a collaboration partner (scale 1-10)
Healthcare organizations (N=10)	38	3.8	3.8	7.0
Non-governmental organizations (N=4)	33	4.3	4.3	7.5
Institutions in the area of re search & development (N=2)	50	3.5	2.5	4.0
Patient organizations (N=3)	0	-	-	-
Safety and inspection (N=2)	0	-	-	-

Additional open questions in the questionnaires revealed that performance gaps are often due to differences in the nature of expectations. For example, local government with a community accountability aiming to let patients participate in the community versus the clinical accountability of a mental healthcare provider (GGzE) aiming to provide the best care possible for patients with mental disorders. Furthermore, stakeholders want to focus on chain care, collaboration and alignment with GGzE. Although their intentions are good, stakeholders experience recalcitrant organizational structures that lead to ineffective collaboration. In particular, GPs perceive considerable bureaucracy in their relation with GGzE. The qualitative results of the interviews with the GGzE management show that GPs are very important for GGzE because they bridge primary care and secondary care, in which GGzE operates.

Stakeholder salience (Step 4)

After identifying the stakeholder groups (Step 1), determining the nature of their expectations (Step 2) and determining performance gaps (Step 3), the next step is to determine which stakeholders should receive managerial attention; in other words, which stakeholders have the highest stakeholder salience (Step 4). Stakeholder salience is determined by power, legitimacy, and urgency [8]. These attributes were measured on a scale from 1-7 after they were tested for their reliability. Equally important as the earlier steps of the analysis, measurement of stakeholder salience was done for the 8 stakeholder groups that were identified based on the list in GGzE's 2011 Annual Report.

The scales measuring utilitarian power, normative power, legitimacy and urgency were tested for their reliability. The scale measuring *legitimacy* for 'healthcare organizations' resulted in a Cronbach's alpha of 0.065, which is highly unreliable. The scale measuring *normative power* for 'non-governmental organizations' had a Cronbach's alpha of 0.345, which is also unreliable. Therefore, these two latter items were deleted from the scales. This resulted in a Cronbach's alpha that was ≥ 0.6 for the scales measuring the four variables (utilitarian power, normative power, legitimacy and urgency).

Stakeholders were then classified into stakeholder salience categories based on their measured power, legitimacy and urgency [8]. Table 4 shows that the stakeholder group 'patient organizations' is perceived to be a *dependent* stakeholder. A large group is perceived to be *definitive* stakeholder, i.e. financiers, healthcare organizations, non-governmental organizations, the government, and inspection services. Finally, institutions in the area of research and development are perceived to be *demanding* stakeholders. Based on these classifications GGzE is able to determine which stakeholder groups should be prioritized and which communication strategies are appropriate for different stakeholders [8,28]. In theory, definitive stakeholders are the groups with the highest stakeholder salience that possess all three attributes (power, legitimacy, and urgency).

Table 4 Stakeholder salience

Stakeholder group	Mean score attribute (scale 1-7)	Possession of attributes	Stakeholder salience
Patient organizations	Utilitarian power: 4.1 Normative power: 6.1 Legitimacy: 5.9 Urgency: 5.3	No power, legitimacy, urgency	Dependent stakeholder
Financiers	Utilitarian power: 6.6 Normative power: 5.2 Legitimacy: 5.2 Urgency: 6.3	Power, legitimacy, urgency	Definitive stakeholder
Healthcare organizations	Utilitarian power: 4.8 Normative power: 5.6 Legitimacy: 5.0 Urgency: 5.3	Power, legitimacy, urgency	Definitive stakeholder
Non-governmental organizations	Utilitarian power: 4.6 Normative power: 5.8 Legitimacy: 5.0 Urgency: 5.4	Power, legitimacy, urgency	Definitive stakeholder
Institutions in the area of research & development	Utilitarian power: 3.9 Normative power: 5.7 Legitimacy: 3.7 Urgency: 5.0	No power, no legitimacy, urgency	Demanding stakeholder
Institutions in the area of safety	Utilitarian power: 4.0 Normative power: 5.1 Legitimacy: 4.8 Urgency: 5.4	No power, legitimacy, urgency	Dependent stakeholder
Government	Utilitarian power: 5.4 Normative power: 5.2 Legitimacy: 5.1 Urgency: 5.8	Power, legitimacy, urgency	Definitive stakeholder
Inspection services	Utilitarian power: 4.3 Normative power: 5.6 Legitimacy: 5.4 Urgency: 6.1	Power, legitimacy, urgency	Definitive stakeholder

Applicability of the stakeholder management process model [10] for mental healthcare providers

This section provides results of the assessment of the applicability of Preble's model [10] for mental healthcare providers. Within a process and effect evaluation we analyzed the performance of Steps 1-4 of the stakeholder management process model of Preble [10].

Step 1: Stakeholder identification

The goal of classifying stakeholders into groups is to enable development of a stakeholder strategy

for same-type stakeholders, rather than for each individual stakeholder. The stakeholder analysis at GGzE resulted in a list of stakeholders and the classification of these stakeholders into 8 groups. This classification revealed anomalies in our case study, because several stakeholders appear to have different roles. According to the board of directors the model should have focused on organizational characteristics in order to connect to organizational objectives and to be uniform in the identification of external stakeholders. According to managers at GGzE, the model is not clear on which organizational the level stakeholders should be identified. Therefore, this aspect should be clarified; stakeholders can be analyzed based on tactical or strategic business requirements. In practice, it is important to be able to perform stakeholder analysis looking at both aspects. The practical application of identifying stakeholders is not tailored to fit the needs of a mental healthcare organization. There is insufficient time and resources to conduct yearly interviews with the entire management board, which would be needed to update the stakeholder list. The willingness to participate in this analysis was high, probably due to the fact that the analysis was presented as a pilot study. If required more frequently, it would be increasingly difficult to find people available to participate. According to the GGzE management board, working with an existing list entails the risk of losing focus on stakeholders if the list is checked quickly only once a year. Managers believe that a Customer Relationship Management (CRM) system is needed if stakeholder analysis needs to be performed on a regular basis. Knowledge about one's stakeholders is the basis of stakeholder management. In the present study, stakeholders were identified only from the perspective of the health care organization itself (GGzE). Ideally this should also be investigated from the perspective of stakeholders, which means asking stakeholders to provide a factual description of their relationship with GGzE.

Step 2: Determining stakeholder expectations

In performing the second step of the case study (identifying stakeholder expectations) we had difficulty linking stakeholder groups (identified in step 1) to specific expectations of stakeholders in each domain of accountability [9]. The results from this second step of the stakeholder analysis were perceived as an improvement on existing knowledge by the management board and board of directors of GGzE. However, the management of GGzE stated that the terms 'clinical, commercial, political and community accountability' could cause confusion when used in connection with the practice of a mental healthcare provider. Although a definition of the domains was provided by Danksy and Gamm [9], managers are likely to interpret the terms intuitively, which may lead to different classifications of stakeholders within these domains. Another issue raised by managers regarding the classification of Dansky and Gamm [9] is that several stakeholders can be classified in more than one domain of accountability, since they can have multiple roles in relation to a mental healthcare provider. Different interpretations of terms could lead to different interpretations of stakeholder's expectations, which could lead to different outcomes when developing strategies. Therefore, agreement on the interpretation should be reached before drawing conclusions regarding stakeholder expectations.

Step 3: Determining performance gaps

In order to execute step 3 of the model (determining performance gaps) it must be clear which expectations stakeholders have and how these relate to organizational objectives [10]. The measurement of performance gaps was done on both the organizational (GGzE) and stakeholder level. Ideally, both measurements should be compared to reveal any performance gaps. However, it was not possible to reach all stakeholders of the distinct stakeholder groups needed for the determination of performance gaps, due to insufficient contact information. Therefore, it was decided to include only those stakeholders that could be contacted. This resulted in only three stakeholder groups being investigated: healthcare organizations, non-governmental organizations, and organizations in the field of research and development. Another shortcoming was the lack of a validated questionnaire to measure performance gaps in mental healthcare, which meant a questionnaire had to be developed. Performance gaps are considered to be vital information by the managers of GGzE, which means that the outcome of this step of the model can be important for improving stakeholder management in mental healthcare organizations. However, available resources and practical applicability should be scrutinized first.

Step 4: Prioritizing stakeholder demands

The final step in the analysis phase of the stakeholder management process model of Preble [10] is prioritizing stakeholder demands. This prioritization is done by the organization itself which, according to the management board of GGzE, is also a pitfall because it does not take the perception of the stakeholders themselves into consideration; if an organization wants to match the expectations of stakeholders, it is important to also consider this latter information. However, pragmatic use of this step of the model should be kept in mind. GGzE (like most other mental healthcare organizations) lacks the time and resources to be able to routinely conduct questionnaires such as presented by Bravo [22]. Therefore, the amount of time that can be invested should be considered beforehand; this might imply that a complete analysis is only done about once every four years, while in daily operations a more pragmatic approach can be taken. Determining stakeholder salience enabled us to prioritize GGzE's different stakeholder demands and to define different communication strategies in a new stakeholder policy plan. In view of the current developments in the mental healthcare sector (budget cuts, system amendments and market forces), prioritizing stakeholder demands is part of an effective stakeholder policy. According to the management board and board of directors of GGzE, this step in the analysis produced very useful information which can improve important stakeholder relations by applying tailored communication strategies for different stakeholders.

Discussion

Discussion of the results of the analysis (Steps 1-4)

Provided that the model is adapted for the specific sector, a combination of the different steps of

analysis is of greater benefit than performing each of the steps separately. Available information can be used continuously in the process of stakeholder management. The link between the different steps also adds value to the information that is found, because it contributes to the development of knowledge and the integration of stakeholder management as an integrated process in policy planning, rather than simply providing basic information on the characteristics of different stakeholder groups. In addition, to reach the intended goal (i.e. developing strategies) information is needed that elaborates on information obtained earlier in the process.

However, when evaluating the practical applicability of the model with the board of directors and management board of GGzE, it was mentioned that the different steps of the analysis should be combined to make it feasible. Nowadays, mental healthcare organizations are forced to look critically at how their resources are deployed. Practical use of the stakeholder management process model of Preble [10] is only possible when applied pragmatically and when the resources (e.g. CRM, contact information, questionnaires, management time) needed to perform an analysis are immediately available.

Practical constraints regarding the applicability of the model were revealed in an early stage of the analysis. In the identification phase the lack of contact information hampered the process, which had a knock-on effect in the following stages of analysis. A CRM system should be implemented to support stakeholder management in the future. However, this can only work if the mindset of the organization is aimed at using the information gathered about stakeholders for the purpose of building relationships and using stakeholder relations to improve organizational policy. This starts with an in-depth identification of stakeholders and an understanding of how interrelated aspects are covered within the stakeholder network.

The results of this study show that stakeholder management is not yet seen as the core business of a mental healthcare provider. Given the current development of market forces in the Dutch healthcare sector, a change in organizational thinking is needed regarding stakeholder management and willingness to invest in it. Seeing stakeholder management as a periodical evaluation of stakeholder contacts and the holding of a yearly stakeholder meeting will no longer suffice. Instead, it needs to be a continuous process that should not require the whole organization to be mobilized when activities which involve stakeholders are at hand.

Recommendations for Steps 5 and 6

Based on the results of Steps 1-4 of Prebles' model (which together make up the stakeholder analysis) the next step is to develop organizational responses to improve stakeholder relations [10]. Different communication strategies can be applied to address different stakeholder groups [28]. Stakeholder groups classified as high priority stakeholders are perceived as groups that need to be informed and influenced in order to optimize these relationships and reach organizational objectives. Communication with these stakeholders is aimed at open dialogue in building relationships, promoting understanding, and seeking new ways of conducting business to improve

mutual advantage and collaboration [10]. The actual content of communication is based on the underlying expectations. Finally, because stakeholder positions on issues tend to change over time, stakeholder expectations should be continuously monitored and evaluated [10] to avoid pursuing a strategy which has become obsolete. This continuous evaluation can be incorporated into a multiyear policy cycle.

Besides collecting up to date contact information, it might be worthwhile to create virtual stakeholder groups that match the groups identified in the first step of the analysis. These groups can be labeled with certain characteristics that are important for communication strategies and (in particular) for the development of communication instruments. Another benefit could be to create discussion forums based on these virtual groups that would discuss policy measures of the organization; this would provide useful feedback and avoid the risk of overloading stakeholders with information that is not relevant to them. Discussion will then be more tailored and in-depth, and can be incorporated in a yearly stakeholder meeting to which all interested parties are invited. This can contribute to the integration of stakeholder management into the core business of the organization and help to prevent stakeholder relations becoming a yearly exercise based only on a paper policy.

Conclusions

This study contributes to the understanding and application of stakeholder management in mental healthcare organizations. However, additional research is needed to successfully implement this as a management tool within the mental healthcare sector. The first step is to adapt the steps of the model for the specific field of mental healthcare and to improve the feasibility of the model in practice. For this, the model should also be assessed in other mental healthcare organizations. This will generate more input for the revision and adaptation of the model and improve its general applicability in mental healthcare organizations. Also, results should be evaluated to check whether this method of stakeholder management actually leads to a better relationship as perceived by a mental healthcare organization and its stakeholders. It may also be possible to measure the effectiveness of the model by asking patients if they notice an improvement in cooperation. These evaluations could prove valuable after stakeholder management has been fully implemented within the organization.

References

1. Blair JD, Fottler MD: *Challenges in Health Care Management: Strategic Perspectives from Managing Key Stakeholders.* San Francisco: Jossey Bass; 1990.
2. Freeman RE: *Strategic Management: A Stakeholder Approach.* Boston: Pitman; 1984.
3. Balser D, McClusky J: **Managing stakeholder relationships and nonprofit organization effectiveness.** *Nonprofit Management and Leadership* 2005, **15**: 295–315.
4. Wolfe RA, Putler DS: **How tight are the ties that bind stakeholder groups?** *Organization science* 2002, **13**(1): 64-80.
5. Brugha R, Varvasovszky Z: **Stakeholder analysis: a review.** *Health Policy and Planning* 2000, **15**(3): 239-246.
6. Rouse WB: **Health Care as a Complex Adaptive System: Implications for Design and Management.** *The bridge* 2008, **38**(1): 17-25.
7. Page CG: **The determination of stakeholder salience in public health.** *Public Health Management Practice* 2002, **8**(5): 76–84.
8. Mitchell RK, Agle BR, Wood DJ: **Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts.** *Academy of Management Review* 1997, **22**(4): 853– 886.
9. Dansky KH, Gamm LS: **Accountability framework for managing stakeholders of health programs.** *Journal of health organization and management* 2004, **18**(4): 290-304.
10. Preble JF: **Toward a comprehensive model of stakeholder management.** *Business and Society review* 2005, **110**(4): 407-431.
11. Glasgow RE, Linnan LA: **Evaluation of theory-based interventions.** In *Health Behavior and Health Education: Theory, Research, and Practice (4nd ed.)*. San Francisco: Jossey-Bass; 2008.
12. Clarkson MBE: **A stakeholder framework for analyzing and evaluating corporate social performance.** *Academy of Management Revi*ew 1995, **20**: 65–91.
13. Donaldson T, Preston LE: **The stakeholder theory of the corporation: Concepts, evidence, and implications.** *Academy of Management Review* 1995, **20**: 65–91.
14. Carroll AB: *Business and Society: Ethics and Stakeholder Management (3rd Edition)*. Cincinnati, OH: South-Western College Publishing; 1996.
15. Agle BR, Mitchell RK, Sonnenfeld JA: **Who matters to CEO´s. An investigation of stakeholder attributes and salience, corporate performance, and CEO values.** *Academy of management journal* 1999; **42**(5), 507-525.
16. Rotarius T, Liberman A: **Stakeholder management in a hyperturbulent health care environment.** *Health care management* 2000, **19**(2): 1-7.
17. Rowley TJ: **Moving beyond dyadic ties: A network theory of stakeholder influences.** *Academy of Management Review* 1997, **22**: 897–910.
18. Atkinson A, Waterhouse J, Wells RA: **Stakeholder approach to strategic performance measurement.** *Sloan Management Review* 1997, Spring: 25-37.
19. Frooman J: **Stakeholder influence strategies.** *Academy of Management Review* 1999, **24**: 191–205.
20. Jain SC, Kedia BL: *Enhancing global competiveness through sustainable environmental stewardship.* Edward Elgar publishing; 2011.
21. Ogden S, Watson R: **Corporate Performance and Stakeholder Management: Balancing Shareholder and Customer Interests in the U.K. Privatized Water Industry.** *The Academy of Management Journal* 1999, **42**(5): 526-538.
22. Bravo GA: *An investigation of stakeholder influence and institutional pressures on budget strategies of high school athletic departments.* Ohio State University; 2004.
23. Yin RK: *Case Study research, design and methods.* Thousand Oaks: Sage; 1994.
24. Eisenhardt KM: **Building theories from case study research.** *The Academy of Management Review* 1989, **14**(4): 532-550.
25. Parent M, Deephouse DL: **A case study of stakeholder identification and prioritization by managers.** *Journal of Business Ethics* 2007, **75**(1): 1-23.

26. Bryman A: *Social Research Methods.* Oxford: Oxford University Press; 2008.
27. Boeije H: *Analyseren in kwalitatief onderzoek. Denken en doen.* Den Haag: Boom Onderwijs; 2006.
28. Ruler B: *Strategisch management van communicatie: introductie van het communicatiekruispunt*. Houten: Bohn Stafleu Van Loghum; 1999.

Chapter 5

The external environment of mental healthcare providers

Published as:

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Abstract

Background. Despite large-scale investments in mental healthcare in the community since the 1990s, a trend towards reinstitutionalization has been visible since 2002. Since many mental healthcare providers regard this as an undesirable trend, the question arises: *In the coming 5 years, what types of residence should be organized for people with mental health problems?* The purpose of this article is to provide mental healthcare providers, public housing corporations, and local government with guidelines for planning organizational strategy concerning types of residence for people with mental health problems.

Methods. A scenario analysis was performed in four steps: 1) an exploration of the external environment; 2) the identification of key uncertainties; 3) the development of scenarios; 4) the translation of scenarios into guidelines for planning organizational strategy. To explore the external environment a document study was performed, and 15 semi-structured interviews were conducted. During a workshop, a panel of experts identified two key uncertainties in the external environment, and formulated four scenarios.

Results. The study resulted in four scenarios: 1) Integrated and independent living in the community with professional care; 2) Responsible healthcare supported by society; 3) Differentiated provision within the walls of the institution; 4) Residence in large-scale institutions but unmet need for care. From the range of aspects within the different scenarios, the panel was able to work out concrete guidelines for planning organizational strategy.

Conclusions. In the context of residence for people with mental health problems, the focus should be on investment in community care and their re-integration into society. A joint effort is needed to achieve this goal. This study shows that scenario analysis leads to useful guidelines for planning organizational strategy in mental healthcare.

Key words. Residence, Mental healthcare, Scenario analysis, Strategy planning

Background

In the field of specialized mental healthcare in the Netherlands there are two main types of care for people with (complex) mental health problems. There is inpatient care, where patients stay in a psychiatric hospital unit (institutional care), or in a small-scale residential unit in the community with supervision and support from a mental healthcare provider. There is also outpatient care, where patients live independently and receive ambulatory treatment or care (see Table 1 for terminology). About 90% of patients in Dutch mental healthcare receive outpatient care [1]. In the 1990s the focus of mental healthcare in the Netherlands shifted from mainly institutional care to the extending of community care (small-scale residential care and outpatient care). Stimulated by the Dutch government, mental healthcare organizations gradually reduced the number of conventional inpatient beds in return for a growth in small-scale residences and outpatient care (deinstitutionalization).

Table 1 Terminology

Subject	Interpretation
Inpatient care	Care that is supplied while residence is provided by the mental health care supplier at a central location or in society (see 'small-scale residential care').
Institutional care	Inpatient care at a central location.
Small-scale residential care	Care that is supplied while residence is provided in the community by the mental health care supplier.
Outpatient care	Ambulatory care.
Conventional inpatient beds	Beds in the institution for regular intramural care; institutional care.
Forensic beds	Beds in the institution for specialized forensic care.
Places for supervised and supported housing	Rooms or apartments that are available in forms of residence outside the institution (in the community), with supervision and support.
Community care	Small-scale residential care or ambulatory care aimed at integration of mental health patients into society.
Deinstitutionalization	A development of more outpatient care outside the institution and reduction of inpatient care.
Reinstitutionalization	A development leading to more inpatient (mental) health care after a period of predominantly outpatient care.

Table 2 shows that deinstitutionalization has stagnated since 2002 [1-3]. A recent report by the Dutch Association for Mental Health and Addiction Care shows a 3.6% growth in the number of patients receiving inpatient care between 2005 and 2007 [1]. Similarly, reports by the Netherlands Institute of Mental Health and Addiction show a 5.6% increase in inpatient days in mental healthcare between 2002 and 2005 [3]. Although supervised and supported residences show an increase between 2002 and 2006, Priebe *et al.* [2] also report a 6.3% increase in the number of conventional inpatient beds.

Table 2 Inpatient and outpatient care facilities per 100,000 inhabitants in the Netherlands between 1990 and 2007

Per 100,000 persons	*1990*	*1993*	*1998*	*2002*	*2005*	*2006*	*2007*
*Netherlands Institute of Mental Health and Addiction, 2007 (based on data from the Dutch Healthcare Authority)**							
Conventional inpatient beds	-	152	141	124	131	-	-
Supervised and supported housing places	-	26	34	38	51	-	-
Outpatient contacts	-	26,780	30,305	31,182	57,551	-	-
*Priebe et al., 2008 (based on data in Psychiatric Case Registers)***							
Conventional inpatient beds	161	-	-	128	-	136	-
Forensic beds	5	-	-	11	-	14	-
Places for supervised and supported housing	25	-	-	40	-	51	-
*Dutch Association for Mental Health and Addiction Care, 2009**							
Inpatient beds (conventional + supervised and supported housing)	-	-	-	-	165	171	171
Outpatient contacts	-	-	-	-	57,592	63,605	73,337

*calculated based on original numbers
** original numbers in research paper

Priebe *et al.* [2] cite several possible explanations for this emerging reinstitutionalization: greater morbidity related to urbanization, changing lifestyles and drug use, an increase in risk aversion, a decrease in informal support, a strategy of healthcare providers to invest in (relatively budget-safe) inpatient care, and the tendency of health insurance companies to move healthcare costs for complex groups away from private insurance to the social care sector (provided in the Netherlands under the Social Support Act or Exceptional Medical Expenses Act).

This reinstitutionalization is an undesirable trend in relation to the policy vision that mental healthcare in the community should be stimulated [4]. Therefore, mental healthcare providers have been planning policy interventions to restrict this trend. The question they face in relation to a new policy period, in which choices must be made concerning their residential facilities, is: *In the coming 5 years, what types of residence should be organized for people with mental health problems?* This question also arose at *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE), a mental healthcare provider in Eindhoven. With a population of 212,000, Eindhoven is the fifth largest city in the Netherlands. Because of the regional function of GGzE, it has a working area of 525,000 people (Eindhoven and surrounding towns and villages), in which institutional care increased by almost 6% between 2006 and 2008.

Initially, a projection was made to estimate the number of patients that could be expected in 5 to 10 years. However, this demographic projection did not provide a reliable basis. Apart from demographic changes, the mental healthcare sector is also faced with socio-economic changes

and developments in society. These developments can have considerable impact on people with mental health problems, and consequently on the options of mental healthcare providers regarding the types of residence for their patients. Because this leads to much *uncertainty* about the characteristics of future residences for mental healthcare, an additional qualitative study was needed to explore the influence of these developments.

A method for exploring the many aspects of future developments, in which uncertainty plays an essential role, is offered by *scenario analysis*. The essence of scenario analysis is to acquire a better understanding of the external environment, to create pictures of possible futures, and to enhance policy planning based on these pictures [5]. In the Netherlands, several organizations in the social sector perform scenario studies, including the Dutch Network for Futures Research, Strategy Development and Health Care Innovation [6], the 'Public Health Status and Forecasts' of the National Institute for Public Health and the Environment [7], the Netherlands Institute for Social Research [8], and, in the mental healthcare sector, the Netherlands Institute of Mental Health and Addiction [9]. All these organizations perform *macro-level* studies on scenarios in healthcare. In the profit sector, several organizations use scenario analysis on a smaller scale as a tool for planning organizational strategy. Since the successful use of the scenario approach by Shell at the time of the oil crisis, various other organizations (e.g. the car industry) have adopted the method [10-12]. This suggests that scenario analysis may also contribute to better strategy planning at a regional level in the healthcare sector. Therefore, the present study used scenario analysis to gain more insight into the need for different types of residence in mental healthcare in Eindhoven. This study was carried out by GGzE, in cooperation with public housing corporations and the Eindhoven Local Authority.

The main questions are:

1. *What are realistic scenarios concerning different types of residence in mental healt care in Eindhoven?*
2. *What are the implications of these scenarios for GGzE, public housing corporations, and local government?*
3. *What guidelines does the scenario analysis offer for planning organizational strategy?*

Methods

General background

Unlike in the past, when strategy planning was based primarily on quantitative extrapolations, qualitative explorations (resulting in scenarios) regarding future developments have nowadays become more common. Although mathematical elaboration can be part of scenario analysis [13], explorations based solely on quantitative analysis often fail, and can lead to wrong assumptions about a future situation [10,14]. In scenario analysis the most important uncertainties are charted as a starting point for developing scenarios. This method can help an organization to develop

policy plans and anticipate future developments [5,15-20]. This does not mean that the future is defined, but that several possible futures are mapped, each of which is realistic but not certain [15-17,21].

Scenario analysis approach

Over the years, there have been several authors who describe scenario analysis as a method for strategic planning, e.g. Van der Heijden [15,17], Postma and Liebl [16], and Wright *et al.* [5]. Probably one of the best known is the scenario analysis method of Van der Heijden [15]. In his book '*Scenarios: the art of strategic conversation*' the author describes both an inductive and a deductive approach to scenario development. The deductive method is described as working from the general to the more specific, whereas the inductive method uses a bottom-up approach. The deductive method, more than the inductive method, aims at thinking beyond what can be reasoned, and is more likely to identify uncertainties [15]. The deductive method of scenario analysis embodies, in summary, the following steps: 1) an exploration of the external environment; 2) the identification of key uncertainties; 3) the development of scenarios; 4) the translation of scenarios into guidelines for planning organizational strategy [15]. Different aspects of these stages of scenario analysis can also be found in other literature, e.g. Ringland [11], Van Asselt [12], Postma and Liebl [16]. Dammers [18], and Schoemaker [22].

The first step is to explore the external environment and identify which certain and uncertain developments confront the organization. This exploration can include a document study of relevant reports and websites, an interview with stakeholders, or both. Exploring the external environment should result in a set of uncertainties concerning future policy of the organization [15,17,18]. The second step is to narrow down the external environment to two key uncertainties, based on the level of uncertainty and the impact on organizational policy issues [11,12,15,16-18]. A method for choosing key uncertainties is to display the uncertainty items on two axes, one determining the level of (un)certainty and the other representing the level of impact [11,15]. Figure 1 shows that the items which are seen as highest on the uncertainty and impact scales represent the key uncertainties that form the basis for scenario analysis. Items that are seen as high on uncertainty and low on impact are of minor importance to the organization's success, and are therefore in the 'no action' quadrant. Furthermore, items that are considered low on uncertainty and high on impact are important issues that are transparent to the organization and can therefore be anticipated in policy interventions. Finally, low uncertainty-low impact items are also transparent, but of minor importance and should therefore be monitored and kept under control (Figure 1) [23]. The scope of our study is limited to scenario analysis. In the third step, the two key uncertainties are used as the axes in a new diagram, giving rise to four scenarios [15,18,22] (Figure 2). In the fourth step, the four possible futures are discussed by a group of stakeholders. For each of the scenarios, the effect of the scenario on a given subject is described, as well as what will happen if no action is taken. Based on this discussion, policymakers are offered guidelines for the further consideration of their

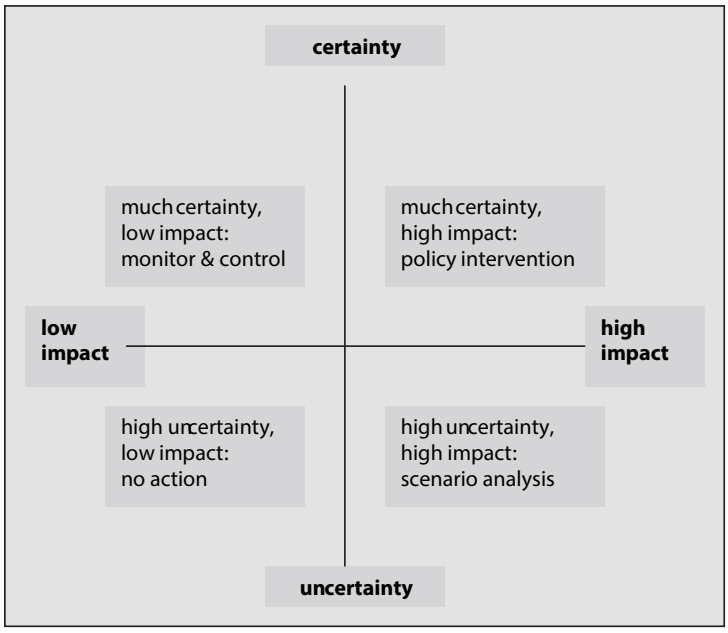

Figure 1 Step 2: the identification of key uncertainties

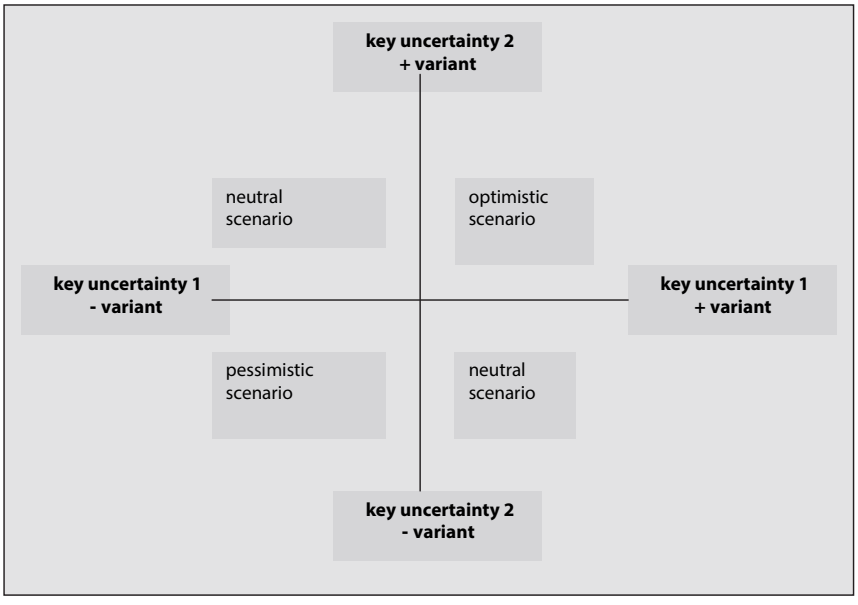

Figure 2 Step 3: development of scenarios

organizational strategy planning [5,15,16]. Depending on the scope of the study, these strategies are tested against each of the scenarios that has been developed [15].

Approach in Eindhoven

The aim of this scenario analysis was to provide guidelines for strategic planning for GGzE and its cooperating partners concerning residence for people with mental health problems in Eindhoven. To perform the study, we used the steps of the deductive scenario analysis method described by Van der Heijden [15].

Exploring the external environment (step 1)

In the scenario analysis in Eindhoven, the external environment was mapped by a document analysis, followed by 15 interviews with a total of 20 participants. Both the document analysis and the interviews were guided by a framework of themes. These themes were selected on the basis of the notion that future scenarios are a collection of events that all have a certain degree of probability of occurring [10,14]. In their Public Health Forecast, the National Institute for Public Health and the Environment refers to demographics, economics, social and cultural developments, technology, and space as the driving forces of external developments [7]. To perform step 1 of the scenario analysis we chose to use these driving forces as a guideline for determining the covering themes of our framework. Furthermore we included policy related developments as a theme and combined cultural developments, technology, and space into one theme (social developments). For exploring the external environment, this leads to the following framework of developments related to:

- demographics
- socio-economics
- society
- policy

Document analysis

In the Netherlands, the national associations that engage in uncovering developments in society and future scenarios are the *Netherlands Institute for Social Research, Statistics Netherlands,* the *Netherlands Bureau for Economic Policy Analysis*, and the *National Institute for Public Health and the Environment*. These organizations are appointed by law to advise the Dutch Ministry of Health, Welfare, and Sport on national healthcare and welfare issues. We therefore chose to analyze reports from these associations in order to arrange our picture of the most recent developments concerning society as a whole. We then gathered more specific information on mental healthcare from the *Dutch Association of Health and Addiction Care* (the umbrella organization for the sector), and the *Netherlands Institute of Mental Health and Addiction*, (the expertise center for mental health and addiction care in the Netherlands). To complete the document analysis, we also looked

at reports by Aedes-Actiz, a branch organization concerned with residence and care for special groups in society.

We coded the information on the basis of the themes we selected before starting our exploration (step 1). The information found in the document analysis, using the themes as search criteria, led to a further specification of our framework.

Interviews

The interviews were held with representatives from mental healthcare providers (7), public housing corporations (5), local government (2), financiers (2), patients' representatives (2), and patients' family organizations (2). A semi-structured interview was conducted, guided by our framework. The interviews were recorded and transcribed. The information was coded on the basis of the framework, and worked out in more detail using the data that was obtained from the interviews. In a workshop, a panel of experts further discussed the interview results. The panel, consisting of experts who were also involved in the study as interviewees, were given the interview data and asked to agree which themes were significant for further scenario building.

Identification of key uncertainties and the development of scenarios (step 2 and 3)

In the interviews we focused on people's views of the present situation and developments they expected in relation to the position of people with mental health problems in society and the consequences for the provision of residences. The result of step 1 is a list of uncertainties deduced from the document study and interviews. These uncertainties were used in a workshop with a panel of 11 experts. These were in policy or management functions with: mental healthcare providers (6), public housing corporations (3), and local government (2) in Eindhoven. We specifically approached these organizations to participate in the workshop because of their shared responsibility for residence provision and policy for mentally vulnerable people in Eindhoven. The dominance of the mental healthcare providers' discipline within the group was controlled by using a facilitator who ensured that every member of the panel was given the opportunity to participate in the discussion, and by dividing people from different disciplines equally within the subgroups that worked on the scenarios during the session.

By means of a two-axis system (Figure 1), two key uncertainties affecting residence for people with mental health problems in Eindhoven were identified (in 3 subgroups) from the list of uncertainties (step 2). Figure 2 was then used by the subgroups to compile four scenarios. The scenarios represent a first draft of the expectations that stakeholders have of the future and the implications that these scenarios have for a specific organizational strategy. In this scenario analysis, policymakers of organizations concerned with residence for people with mental health problems in Eindhoven, jointly outlined four scenarios that provide guidelines for actions to optimize the provision of residences (step 3).

Translation of scenarios into guidelines for planning organizational strategy (step 4)
This scenario outline was further defined using the plenary discussion that followed the initial compiling by the subgroups in the workshop. The different aspects of the scenarios were discussed, which led to the recognition that several actions needed to be taken in strategy planning in order to anticipate future developments. The scenario analysis and discussion about the impact and consequences of the scenarios provided the panel with guidelines for strategic planning. The actual drawing up of strategic plans, and the testing and development of these plans for each of the scenarios [15], did not take place within the scope of our study.

Results

Exploring the external environment (step 1)
The external environment was explored using the framework as described in the Methods section. It can be characterized by demographic, socio-economic, social, and policy topics.

Demographic topics that were found in the document study were aging, immigration, and family composition [24]. During the coming 30 years, the average age of the population of the Netherlands will be increasing, mainly due to the baby boom of the 1940s/1950s [24]. An increasing number of the elderly, combined with a decreasing labor force, will have consequences for healthcare demand and supply. Various technological developments in healthcare will partly compensate for a smaller working population. These will meet the growing wish of people to be self-reliant despite a physical or mental handicap. Furthermore, the document study resulted in a set of topics concerning socio-economic developments, such as income, work, and education [7], which will have their effect on future care consumers and also on the match between supply and demand in healthcare.

Due to new market forces, the (mental) healthcare sector has major concerns about the financial resources that will be available in the near future for adequate residence, care, and treatment for patients with mental health disorders. This implies that a larger demand may be made on society. At the same time, society is changing rapidly: in the coming years individualism in society will increase further, which will diminish social cohesion [25]. In addition, there will be greater freedom of choice, making individuals more critical and assertive about their needs and wants [25]. Acceptance, integration, and the use of technology in healthcare are issues that are largely dependent on these developments in society.

The interviews showed that, in general, experts believe that this means that people with mental health problems will be easily stigmatized and excluded from society, which places more pressure on intramural facilities. The reinstitutionalization trend is already visible in the Netherlands: from 2002-2006 there was a 6% increase in the number of psychiatric hospital beds [2]. The document study and interviews resulted in a set of uncertainties concerning the external environment (Table 3).

The identification of key uncertainties (step 2)

Using the list of uncertainties (Table 3), two key uncertainties were identified: the *availability of financial resources* for mental healthcare and the *possibilities for successful integration* into society. Figure 3 shows how the different uncertainties that emerged from exploring the external environment (step 1) were placed on two axes, and resulted in two key uncertainties as the basis for four scenarios.

Table 3 List of uncertainties

Demographics	Socio-economics
- co-morbidity of mental and somatic problems	- available labor force
- different care demand of the elderly in the future	- freedom of choice for mental health care patients
- increasing care demand in autism	- empowerment of mentally vulnerable people
- independent living for the elderly	- role of relatives in empowerment of mentally vulnerable people
	- accessibility of mental health care
Society	**Policy**
- acceptance of mental health care patients in the community	- availability of sufficient financial resources
	- differentiation in supply
- effects of technological developments	- future of the Exceptional Medical Expenses Act
- independent living for mental health care patients	- market forces in (mental) health care
- possibilities of successful integration of people with mental health problems	- patient flow possibilities
	- political developments
- stigmatization of mental health care	- Social Support Act for people with mental health - problems
- social tolerance level	
- reaching foreign patients	- separation of residence and care
	- tuning and cooperation between network partners

The development of scenarios (step 3)

To find four scenarios that are realistic (but still uncertain), the two key uncertainties were used as scales in a system of axes that was used to develop scenarios. Based on a discussion of the implications of the different possible combinations of key uncertainties on types of residence needed for people with mental health problems, the panel compiled four scenarios (Figure 4):

1. Integrated and independent living in the community with professional care (high on financial resources, high on integration)
2. Responsible healthcare supported by society (low on financial resources, high on integration)
3. Differentiated provision within the walls of the institution (high on financial resources, low on integration)
4. Residence in large-scale institutions but unmet need for care. (low on financial resources, low on integration)

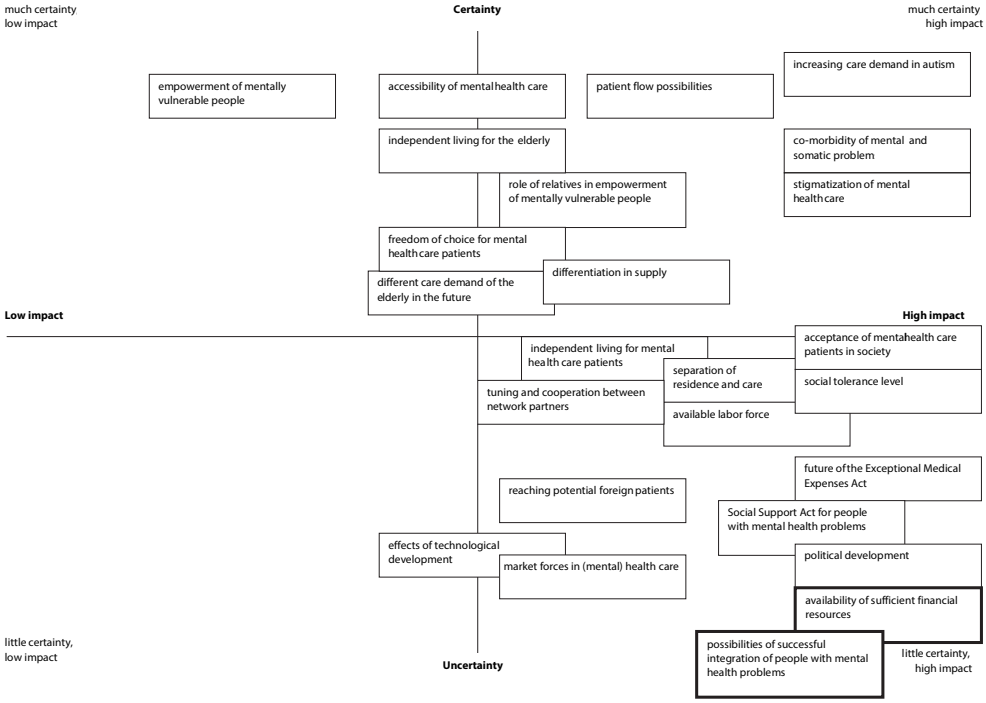

Figure 3 Plot of uncertainties in the external environment resulting in key uncertainties

Scenario 1: Integrated and independent living in the community with professional care

A high level of integration into society of people with mental health problems is an important policy goal of mental healthcare providers, public housing corporations, and local government. Successful integration of people with mental health problems enhances the wellbeing of these people, and may lead to a lower need for professional care. Integration also advances people's possibilities of being self-reliant and of living independently or in a group. In this scenario financial resources can provide for highly differentiated and specialized outpatient treatment by a mental healthcare provider.

Scenario 2: Responsible healthcare supported by society

In a scenario where integration is high and financial resources in the mental healthcare sector are low, the demand for professional mental healthcare could decrease. This would be due to voluntary care from a patient's direct environment, which 'takes over' certain aspects of care that would otherwise need to be delivered by (costly) professional facilities. Furthermore, mental health problems may be partly prevented, symptoms may be reduced because of the individual's integration into society, and negative influences on wellbeing and functioning may be reduced through integration into

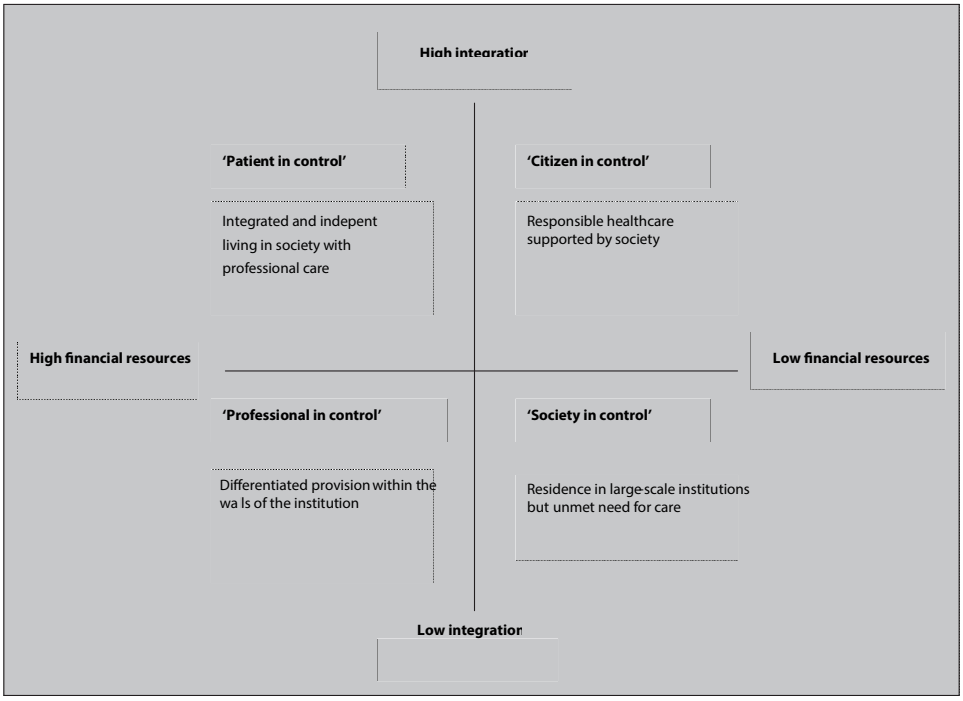

Figure 4 Scenarios for residence for people with mental health problems in Eindhoven (Eindhoven, 4 November 2008)

society. This scenario would mean that there is limited need for professional care. Obviously, there is also a group of people with mental health problems with complex psychiatric disorders who (also in this scenario) require professional treatment and (residential) care. Nevertheless, should this scenario become a reality, there would be a large increase in demand for independent housing facilities and small living facilities among those requiring mental healthcare.

Scenario 3: Differentiated provision of healthcare within the walls of the institution

In scenario 3, integration has failed, which will further stimulate the pressure on intramural facilities within mental healthcare institutions. People with mental health problems will be dependent on the 'safe' environment of the institution. Concentrated within the institution, a large range of differentiated customized care is available, with separate facilities for each group. There will probably be a reduced need for independent housing facilities outside the institution, since society does not accept their use. In summary, in this scenario there will be an increase in demand for professional care in an intramural setting, and the mental healthcare sector will have the financial resources to amply provide it.

Scenario 4: Residence in large-scale institutions but unmet need for care

In this feared scenario of both a low integration level and a low availability of financial resources in mental healthcare, patients' needs and quality of life are no longer central in planning supply. The lack of social integration of people with mental health problems will stimulate the need for residential facilities in a safe and protected environment. In these facilities there will be too few staff to deliver adequate care. Customized care will become a rarity. Independent and normalized living for people who cannot manage on their own will have no place in this scenario. The availability of professional support, care, and treatment will be limited and only in large-scale institutions.

Translation of scenarios into guidelines for planning organizational strategy (step 4)

In the final step, the panel translated the results into guidelines for organizational strategy. Examining the four scenarios, the panel formulated two key strategies: investing in financial and social security, which means institutional, predominantly inpatient care facilities, or taking some acceptable risks and investing in the integration into society of people with mental health problems.

Market forces have increasingly been driving healthcare providers to focus on financial resources. In the Netherlands, since 2006, the healthcare financing system has changed from budget-based costing towards performance-based costing. The limited budget compels mental healthcare providers in the Netherlands to negotiate every year with financiers about healthcare procurement. Consequently, a scenario in which financial resources are high and integration into society is successful (scenario 1), initially seemed the most positive scenario to the panel. In this scenario the financial resources are abundant, making it possible to offer broad and differentiated care programs, including specialized mental healthcare and a wide range of options for residential facilities. However, after careful consideration of the consequences and implications of this scenario, the panel found that several negative outcomes can be expected. When there is an abundance of financial resources this can lead to a substantial supply of professional care, which can have negative consequences at the integration level. Excessive professionalization of healthcare for people with mental health problems living in the community can lead to further stigmatization which, as a result, would again isolate them from society. The panel concluded that that would lead to scenario 3 (*Differentiated provision of healthcare within the walls of the institution*). With current budget cuts in the healthcare sector scenario 1 seems a risk. Also, financiers - under the pressure of a limited budget – tend to invest in the financially more solid intramural facilities [2]. Choosing financial security restricts patients in their opportunity for recovery and equal citizenship. Each citizen has the right to an agreeable living environment, to perspectives, to freedom of choice and participation in society [4]. This demands an extra effort on behalf of people with mental health problems. After this discussion in the workshop, the panel concluded that strategies should be aimed at trying to fulfill scenario 2 (*Responsible healthcare supported by society*) [26].

Discussion

From scenarios to organizational decision making

In this case study, the panel unanimously considered 'integration' to be the basis for their future strategy planning. Without the scenarios, policy would probably be primarily aimed at gaining substantial financial resources. Although the latter is important, the scenarios were an eye-opener, and showed the panel that more focus on integration and participation in society of people with mental health problems is probably better realized under the pressure of a limited budget. This does not imply the need for new policy plans for the mental healthcare branch, because it has been a point of discussion for the last few decades. Paradoxically, care in the community has been the vision of the sector for several years, but it has not yet been successfully taken up in all of the sector's policy. To achieve this, there should be more cooperation between public housing corporations, local government, and collaborating partners. The study also shows the difficulty of achieving integration, especially in view of the current financial pressure. Besides financial uncertainty, there is the question of a changing society. Because of individualism, changing lifestyles, and the falling tolerance level, much effort is needed to achieve a situation in which people take responsibility for each other. Mental healthcare providers, public housing corporations, and local government in Eindhoven concluded that they have to consider these developments in relation to their policy goals.

Achieving integration is, to a large extent, one of the primary policy goals of care providers, local government, and public housing corporations. Successful integration into society advances the wellbeing of people with mental health problems, and should decrease the need for professional healthcare. This enhances the possibility of achieving independent or group living in a normal community environment as the dominant type of residence. Conversely, reduced financial resources, should act as an incentive for society to take responsibility. Healthcare providers, together with public housing corporations and local government, aim to invest in making people aware of this responsibility. When achieved, this could mean that participation of mentally vulnerable people in society is enhanced with less financial expenditure. However, this demands considerable action, which is represented in the 4-year policy plans of GGzE: investing in "*social support systems, separation of residence and care (e.g. by using home automation facilities), effective spending on daycare, reaching closely involved people, and investing in chain care*". There should be pressure against further extension of residential care. This does not imply that inpatient care has no benefits or should gradually disappear because a large group of people will not be able to live in the community on their own. For this latter group, inpatient care is needed and should be available in an agreeable and safe environment. Nevertheless, the vision in Eindhoven is that the goal should be to treat people as much as possible with ambulatory care, and to institutionalize only if there is no possibility for the patient in the community. This changes the way of thinking about inpatient care from "yes, if…" to "no, unless…".

The usefulness of scenario analysis as a method for policy planning

Benefits

Scenario analysis has proved to be a useful tool for providing guidelines for organizational decision making in healthcare. That has been shown in this case study in Eindhoven. First, it helped to achieve a shared mindset on the central issue of residence for people with mental health problems. Second, it provided a structure in which uncertain developments concerning this topic were easily exposed by considering a broad range of uncertainties that were systematically narrowed down to two key uncertainties. Third, by means of deducing the key uncertainties and then compiling scenarios, the participants in the workshop achieved a better understanding of the alternative future possibilities. Fourth, this scenario analysis resulted in guidelines for future policy plans. These plans have a good potential for success, since their foundation was established by various stakeholders in a shared setting. Finally, this scenario analysis provided a method for identifying the essence of the central theme, which in this case led to four scenarios with guidelines for future policy on residence in mental healthcare. Drawing on the jointly established view on possible futures for people with mental health problems in Eindhoven, GGzE was able to make strategic plans in the specific area of residence in mental healthcare. The managing director of GGzE Psychiatry (adults) and Geriatrics division has used this scenario analysis in the division's policy plan for the next 4 years. The key message in this policy plan is recovery and equal citizenship.

Generalizability

This study in Eindhoven has shown that it is possible to translate macro-level developments to organizational policy planning using systematic scenario analysis. While current scenario studies are mainly performed at a national level, the method has proved useful at a regional level. Uncertainties can be made transparent at different levels and for specific themes using a uniform method. It is essential to include all necessary stakeholders in the scenario analysis, and to translate macro-level developments to the appropriate level of discussion.

Important remarks about the use of scenario analysis

Scope of scenarios

By focusing on two key uncertainties, the range of topics that have to be taken into account is reduced considerably, and this may involve the risk of ignoring important policy topics. It is therefore essential to involve both certain and uncertain developments in the scenarios. Furthermore, identifying the uncertainties does not mean we have a complete view of all possible futures. Besides the uncertainties, there are the 'unknowables' that are naturally missing from our scenarios [15,16]. This means that there will always be a certain number of unexpected and unanticipated events affecting an organization's business strategies, even when based on scenario analysis. Also, rapid changes in society may imply that the scenario analysis is easily outdated. Therefore, scenario

analysis should not be a single operation, but an iterative process which has a fixed place in the policy cycle of a healthcare provider and its associates.

Testing strategy plans

Van der Heijden [15] explicitly discusses the need to test strategy plans against the many different aspects brought forward by the scenarios. In our study, we performed the steps from exploring the environment to interpreting the different scenarios. However, to conduct scenario analysis according to the method Van der Heijden [15] proposes, a final step should be taken, involving a simulation of the scenarios in which future business strategies are tested and further developed. This would enable the full exploitation of the benefits of scenario analysis.

Assessing all scenarios

After developing the scenarios, a discussion took place to work out tangible guidelines for the planning of future strategy for the residence and care of people with mental health problems in Eindhoven. This resulted in the panel focusing on scenario 2 (*Responsible healthcare supported by society*) as the best basis. However, in scenario analysis it is important to assess all aspects in the different scenarios before developing strategy plans. It is therefore essential to scenario analysis to prevent focusing on a single scenario during the process.

Methodological limitations

A practical limitation of this scenario analysis method is that it is time consuming. In practice, organizations may have insufficient time and staff to perform this extensive project. In the example described here, because there was insufficient time to hold a large number of interviews with patients to explore their perspectives on residence and care, only a patients' representative group was included in the study (step 1).

Furthermore, we did not double code our interview transcripts. However, the interview results were presented to the panel in the workshop, before work on scenarios started.

Organizations can take a practical approach to the method, and use as many elements as they have time for. However, they should be aware that a solid scenario analysis will eventually save time in developing policy plans of higher quality.

Conclusions

The scenario study discussed here shows that, in connection with the future provision of residence types for people with mental health problems in Eindhoven, there should be a focus on investing in a socially supportive and responsible society and community-based care. This implies that more effort should be made to create social support systems and normalized living possibilities. It also means that cooperation between specialized mental healthcare providers, social care, public

housing corporations, and local government is essential.

The scenario study has shown that working with scenarios provides policymakers of healthcare providers, public housing corporations, and local government with concrete guidelines for creating a shared vision of developments concerning a specific issue (in this study, the issue of types of residence for people with mental health problems), and with tools for understanding their implications for future strategy plans. Because the scenarios were constructed jointly by representatives from healthcare providers, public housing corporations, and local government, there is a strong possibility of regional support for strategy planning, of residence and care for mentally vulnerable people in the community by any of the organizations.

References

1. GGZ Nederland *(Dutch Association of Health and Addiction Care)*: *Zorg op waarde geschat* (Valued Care). Amersfoort, the Netherlands; 2009.
2. Priebe S, Frottier P, Gaddini A, Kilian R, Lauber C, Martínez-Leal R, Munk-JØrgensen P, Walsh D, Wiersma D, Wright D: **Mental Health Care Institutions in Nine European Countries, 2002 to 2006.** *Psychiatric Services* 2008,**59(5):**570-573.
3. Trimbos-instituut *(Netherlands Institute of Mental Health and Addiction)*: *GGZ in tabellen 2006* (Mental healthcare in numbers). Utrecht, the Netherlands; 2007.
4. GGZ Nederland *(Dutch Association of Health and Addiction Care)*: *Naar herstel en gelijkwaardig burgerschap: visie op de (langdurende) zorg aan mensen met ernstige psychische aandoeningen* (Towards recovery and equal citizenship: view on long-term care for people with severe mental health problems). Amersfoort, the Netherlands; 2009.
5. Wright G, Van der Heijden K, Burt G, Bradfield R, Cairns G: **Scenario planning interventions in organizations: An analysis of the causes of success and failure.** *Futures* 2008,**40:**218-236.
6. Vulto M: *Maatschappelijke participatie. Perspectieven voor de WMO. Drie toekomstscenario's* (Social participation. Perspectives for the Social Support Act. Three scenarios). Amsterdam, the Netherlands: STG/HMF; 2006.
7. De Hollander AEM, Hoeymans N, Melse JM, Van Oers JAM, Polder JJ (eds): *Zorg voor gezondheid – Volksgezondheid Toekomstverkenning 2006* (Public Health Forecast 2006). Bilthoven, the Netherlands: RIVM; 2006.
8. Woittiez I, Eggink E, Jonker J, Sadirai K: Vergrijzing, verpleging en verzorging. Ramingen, profielen en *scenario's 2005-2030* (Aging, nursing and care. Ratings, profiles and scenarios 2005-2030). Den Haag, the Netherlands: SCP; 2009.
9. Van Hoof F, Vijselaar J, Kok I: **Van overheidssturing naar marktwerking. Stand van zaken en toekomstscenario's in de GGZ *(From government control towards market forces. Actual situation and scenarios in mental healthcare)*.** *Maandblad Geestelijke volksgezondheid* 2009,**64(4):**239-255.
10. Postma TJBM, Vijverberg AMM, Bood RP, Terpstra S: **Toekomstverkenning met scenario's. Een hulpmiddel bij de bepaling van de strategische koers van een organisatie *(Forecasting with scenarios. A tool for strategic organizational decision making)*.** *Bedrijfskunde* 1995,**67(2):**13-19.
11. Ringland G: *Scenario Planning: Managing for the Future.* Chichester, UK: Wiley; 1998.
12. Van Asselt MBA: *Perspectives on uncertainty and risk: The PRIMA approach to decision support.* Dordrecht, the Netherlands: Kluwer; 2000.
13. Bood RP, Postma TJBM: **Leren met scenario's? *(Learning with scenarios?)*.** *Bedrijfskunde* 1995,**67(2):**45-53.
14. Bunn DW, Salo AA: **Forecasting with scenarios.** *European Journal of Operational Research* 1993,**68(3):**291-303.
15. Van der Heijden K: *Scenarios: the art of strategic conversation.* Chichester, UK: Wiley; 1996.
16. Postma TJBM, Liebl F: **How to improve scenario analysis as a strategic management tool?** *Technological Forecasting & Social Change* 2005,**72:**161-173.
17. Van der Heijden K, Bradfield B, Burt G, Cairns G, Wright G: *The sixth sense: accelerating organizational learning with scenarios.* Chichester, UK: Wiley; 2002.
18. Dammers E: *Leren van de toekomst. Over de rol van scenario's bij strategische beleidsvorming* (Learning from the future. About the role of scenarios in strategic policy planning). Delft, the Netherlands: Eburon; 2000.
19. Schoemaker PJH, Van der Heijden CAJM: **Integrating scenarios into strategic planning at Royal Dutch/Shell.** *Planning Review* 1992,**20(3):**41-48.
20. Duncan NE, Wack P: **Scenarios designed to improve decision making.** *Planning Review* 1994,**22(4):**18-25.
21. Van Notten P, Rotmans J: **The future of scenarios.** *Scenario and Strategy Planning* 2001,**1(3):**4-8.
22. Schoemaker PJH: **Scenario planning: a tool for strategic thinking.** *Sloan Management Review* 1995,25-40.
23. Van Bon - Martens MJH, Van Eck ECM, Hoogendoorn SM, Van den Hoogen PCM, Van Oers JAM: *Gezondheid telt! In West-Brabant* (Health counts! In West-Brabant). Breda, The Netherlands: GGD West Brabant; 2006
24. Centraal Bureau voor de Statistiek *(Statistics Netherlands)*. *Bevolking groeit tot 17,5 miljoen in 2038* (Population growth to 17.5 million in 2038). http://www.cbs.nl/nl-NL/menu/themas/bevolking/publicaties/artikelen/archief/2008/2008-085-pb1.htm; 18 December 2008.

25. Sociaal Cultureel Planbureau *(the Netherlands Institute for Social Research)*: *Sociaal en Cultureel Rapport 2004* (Social and cultural report 2004). Den Haag, the Netherlands; 2004.

26. Bierbooms JJPA, Bongers IMB, Vossen MLJW: **Wonen voor psychisch kwetsbaren in 2020: in het bos of in uw achtertuin? *(Residence for mentally vulnerable people in 2020: in the forest or in your backyard?)*.** *Best Practices Zorg* 2009,**4:**35-40.

Chapter 6

Mental healthcare supply

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Bierbooms JJPA, Bongers IMB, Van Oers JAM. An evaluation of the development of a marketing strategy in mental healthcare delivery.

Abstract

Background. Budget restrictions and increasing market forces within the Dutch mental healthcare sector have been forcing mental healthcare providers to manifest the added value of their quality of care. This calls for the development of the marketing skills of a mental healthcare provider, which can still be considered a relatively new activity within this sector.

Methods. In a case study at a mental healthcare provider in the Netherlands we evaluated the professional growth from 2009 onwards of strategic marketing in mental healthcare. A document analysis, log analysis and interview were used as evaluation methods to identify the use of instruments in the area of strategic marketing and to identify the underlying processes and effects.

Results. The results show that several initiatives have been undertaken in the field of marketing. Portfolio analyses proved to be dominant. In addition, organizational strategies had been described, though these were not a direct result of the analyses. The next step for mental healthcare providers is the development of a sound marketing strategy in line with the organizational objectives.

Conclusions. The extent to which mental healthcare providers utilize instruments in strategic marketing is growing. The first steps are visible. Further maturity in this field is required however to anticipate changes that are expected in the mental healthcare market.

Keywords. Marketing strategy, Mental healthcare, Portfolio analysis

Background

Context

Continual rising costs of mental healthcare in the Netherlands, due to an enormous increase in the number of patients in the last ten years,[1] has led to drastic measures by the Dutch government. The coalition government in the Netherlands has recently revealed plans to curb expenditure on mental healthcare and to promote services away from specialized mental healthcare towards primary healthcare services (for example GP's).[2] Specialized mental healthcare providers will be forced to focus on the diagnosis and treatment of more severe and complex psychiatric problems which is beyond the scope of primary healthcare.

The macro budget for specialized mental healthcare is funded through different financial sources, in large part by independent healthcare insurers. Increasing pressure on the availability of financial means for mental healthcare also puts pressure on health insurance companies to be selective in their procurement of mental health services. Healthcare insurers increasingly tend to focus on 'quality of care' as a criterion for healthcare procurement. One large healthcare insurance company in the Netherlands has proclaimed it will publish a list of mental healthcare providers that do and do not satisfy its criteria for quality of mental healthcare. In a newspaper article it states that 'mental healthcare providers need to reflect on their excellent and unique services and the services that are better left to other providers'.[3] This is reaffirmed in their healthcare purchasing strategy, in which they proclaim that selective procurement of top referent healthcare, will be the aim for the coming years.[4]

In line with these developments, it is important for mental healthcare providers to be proactive in attracting the attention of health insurance companies by manifesting their high quality and added value. The challenge is to focus on their particular expertise and show their added value in the healthcare sector in order to 'sell' their products and gain or maintain market share. This requires a market oriented approach, consisting of an identification of the market, the market position of the organization, and the determination of a marketing strategy to approach this market.[5] It also means that management will need to reflect on their present business policy and the potential to maintain or increase market share. This calls for a rigorous mind shift for people working in mental healthcare institutions: from working in a non-profit organization with social objectives, aimed at helping people that are less fortunate, to needing to compete with other institutions. For mental healthcare providers marketing and sales will become increasingly important in the coming years. They will need to consider how they envision this function within their organization, with a view to showing its added value based on the principle of high quality mental healthcare.

Theoretical background

The choice for a particular palette of supply is closely connected to the marketing strategy an organization has chosen and the distinctiveness the organization can herewith disseminate.[6,7]

In determining its marketing strategy, an organization generally goes through the steps of: market research, determining the market position, developing a market strategy and value proposition, and finally choosing a marketing strategy.[8] These steps are akin to those of the STP-process for strategic marketing (Figure 1): segmentation, targeting and positioning.[5]

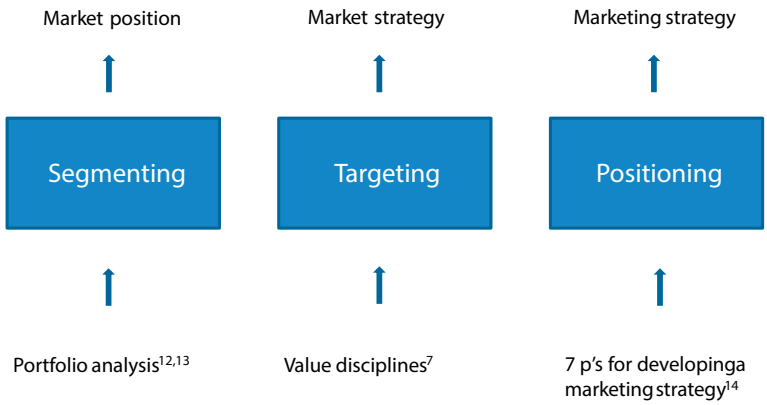

Figure 1 Process for strategic marketing[5]

Segmentation entails identifying market segments that are 'target markets' for the products or services the organization offers.[5] To effectively identify one or more market segments, an organization has to have a clear perception of their market position within these segments. Information should be (made) available about the organization's product portfolio and its relative market position compared to other suppliers.[5] Portfolio analysis is a technique that is commonly used in the for-profit business sector to determine product-market combinations. In the last decennia several authors have also reported on the application of portfolio analysis in the healthcare sector.[9-11] Prominent tools for portfolio analysis are the matrix designed by the Boston Consulting Group (BCG), the Product Life Cycle-analysis, and the McKinsey/G.E. MABA (Market attractiveness and Business attractiveness) analysis.[12,13] Gelderman and Van der Hart,[12] and Mandour *et al.*,[13] describe the process of portfolio analysis in six steps: determining product-market combinations, determining the market attractiveness, determining the business attractiveness (competitive power), scoring the different products, drawing a matrix with the different products, and using the matrix for discussion and strategy development.

After the segmentation phase, from which the market position of the organization is ascertained, the next step in the process is *targeting*, with a view to developing a market strategy.[5] This entails choosing which market segments will be targeted and which products will be offered at a certain quality and price.[5] A suitable tool for developing a market strategy is the model of Treacy and Wiersema[7] who discern three value disciplines: operational excellence (best total cost), product leadership (best product), and customer intimacy (best total solution). Operational

excellence is a strategy that is aimed at the combination of the best price, quality, and buyer's convenience compared to other suppliers. Controlling business processes and improving efficiency is the leading principle within the organization.[7] When an organization focuses on the superior quality of products compared to their competitors, whereby the price is secondary, one chooses a product leadership strategy.[7] Finally, when a customer intimacy strategy is chosen, the organization chooses its customer demands and preferences as a guiding principle. Products and services are continuously adapted to customers' wishes.[7]

When this phase is completed successfully, the organization has worked out the conditions it is operating in and is at the start of *positioning*, meaning a marketing strategy and implementation of activities is at hand.[5,8] For this purpose, the 7 p's model is often used, which enables an organization to communicate effectively about its products and services by distinguishing product, price, place, promotion, people, processes, physical evidence.[14]

Strategic marketing in mental healthcare

The field of marketing is relatively new to the (mental) healthcare sector. Whereas the profit sector is more focused on improving performance and increasing profit margins,[15-17] the healthcare sector has directed its efforts more towards fulfilling the needs of patients and improving the quality of healthcare supply in order to contribute to a better public health status.[18,19] Relatively little is known about the use of the strategic marketing principles in a mental healthcare organization.

In this study, an evaluation was done of the application of instruments, related to the STP-process, to gain knowledge about the development of a marketing strategy in mental healthcare. For this purpose, the following research question was formulated: *To what extent is the STP-process used within a mental healthcare organization and which underlying processes and effects can be recognized?*

Methods

The method that was used to answer the research question is a qualitative explorative case study at a mental healthcare provider in the southern part of the Netherlands: *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen (GGzE)* [Mental Healthcare Organization Eindhoven]. GGzE has a catchment area of 527,000 inhabitants, and offers mental healthcare to children, adults and elderly patients with complex psychiatric disorders. Parts of the organization fulfill a super-regional function; these are: the Clinic for Intensive Treatment (KIB), Intensive Psychiatric Family Treatment (IPG), Youth Forensic Treatment (Catamaran) and the Clinic for Forensic Psychiatric Treatment (De Woenselse Poort). In 2012 approximately 16,000 patients underwent intramural or ambulatory treatment.[20] In 2009 GGzE incorporated a Marketing and Sales department into the central staff of the organization.

In this case study three different methods of evaluation were applied:

[1]. Document study

[2]. Log analysis

[3]. Interview

The evaluation took place from January to May 2013 and reflected on the period from 2009 to May 2013.

Document study

To evaluate the activities of the Marketing and Sales department, documents were researched that contained information on the development of the marketing strategy within the organization. During the period the Marketing and Sales department has been operational (2009 – present) 14 relevant documents were produced (Table 1). The documents were made available by the Marketing and Sales manager. The content of these documents was analyzed using open and axial coding.[21]

Table 1 List of documents

No.	Title
1	Research into the development of a marketing strategy in mental healthcare
2	Portfolio analysis 2012 – proposal
3	Presentation results portfolio analysis 2012
4	Portfolio analysis 2013 – proposal
5	Presentation results portfolio analysis 2013
6	Marketing and communication plan – first draft
7	Corporate stakeholder policy plan
8	Marketing and communication plan – second draft
9	Marketing and communication plan – definitive version
10	Policy plan 2013 Marketing and Sales
11	Marketing plan division x
12	Presentation integration marketing, sales and communication
13	Re-orientation on marketing
14	Multiyear policy plan 2013-2016

Log analysis

Over a 5 month period (January – May 2013) a log was kept by the first author to register the supporting and impeding factors the Marketing and Sales department faced in the development of a marketing strategy for the organization. To this end a meeting was held with the Marketing and Sales manager and a staff member every three weeks. The timeframe for keeping the log was set parallel to the second portfolio analysis (2013).

Keeping a log is a qualitative research method that can be used to monitor and evaluate performance in different healthcare domains.[22] The aim of the log was to detect the organizational

processes that underlie the use of the STP-process for the development of a marketing function within a mental healthcare organization.

Interview

After the evaluation period (January – May 2013), a semi-structured interview was held with the Marketing and Sales manager of GGzE to evaluate the importance of strategic marketing and the professional advancements made within the mental healthcare sector. The topics discussed in the interview were: market forces in mental healthcare, the definition and operationalization of marketing, the development of a marketing function in mental healthcare organizations, and the use of marketing instruments. The interview was recorded, transcribed and coded by means of open and axial coding.[21]

Results

The results of the evaluation are discussed along the lines of the STP-process.[5] First, we describe to what extent the STP-process is utilized within the organization and which instruments are proposed. Secondly, we describe the processes underlying the practical use of these instruments and the effects that are yielded from this.

The STP-process in the practice of a mental healthcare provider

From both the documents and the log it became clear that a lot of effort had been put into the first step of the STP-process (segmentation), and that portfolio analysis as an instrument had been made operational in two (yearly returning) policy cycles. Both in 2012 and 2013 the Marketing and Sales department undertook a portfolio analysis as a starting point for the strategic dialogue about plans for the next year. The McKinsey/G.E. portfolio analysis tool was used to identify the Market Attractiveness (MA) and Business Attractiveness (BA) of the organization's products.[12,13] Data was used from the Electronic Patient Files, the Electronic Financing System and from interviews with a director of each of GGzE's (3) divisions. The results were presented to the board, indicating the market position of the different products that are offered. Both portfolio analyses took four months (January – April) to complete. The documents proposing to perform a portfolio analysis (Table 1, no. 2 and 4) mention a corporate marketing strategy as an ultimate goal. It is stated that portfolio analyses can contribute to the development of a strategic marketing strategy and to sound policy choices (e.g. regarding supply provision). According to these documents, the first step is to gain insight into the market position in the mental healthcare market (segmentation), which can be acquired through a portfolio analysis. The next step would be to be able to decide on possible choices of products GGzE is offering (targeting) and on a strategy to show the added value of these products to potential 'buyers', in this case healthcare financiers. According to these documents, portfolio analysis is an essential part of the marketing and sales process of a mental healthcare

provider. However, the presentations of the results of the two portfolio projects (Table 1, no. 3 and 5) do not mention the next step of developing a corporate marketing strategy; they only contain the actual results of both the portfolio analyses.

At the time the marketing function of the organization was starting to develop, the Marketing and Sales manager was completing an MBA thesis. The thesis was aimed at providing guidelines on how a marketing strategy could be developed for a specific part of the organization. Different instruments are described within the thesis (Table 1, no. 1) related to different stages in the STP-process.[5] These were: 1. Five competitive forces, in which the relative power of competitors, suppliers, substitutes, buyers, and new entrants is analyzed;[23] 2. SWOT analysis, identifying the strengths and weaknesses of the organization;[13] 3. growth strategies, that analyze whether an organization should choose market penetration, market development, product development or diversification as a market strategy;[24] and 4. the 7 p's to determine the marketing strategy of an organization by price, product, place, promotion, process, people, and physical evidence.[14] These instruments were applied in a research setting within a specific part of the organization, which resulted in guidelines to develop a marketing strategy and in an overview of the actions needed within each of the steps of the STP-process with the aim of formulating a marketing strategy.

Other documents which explicitly mention marketing as part of a corporate strategy are: 'Policy plan 2013 Marketing and Sales' (Table 1, no. 10), 'Presentation integration marketing, sales and communication' (Table 1, no. 12), and 'Re-orientation on marketing' (Table 1, no. 13). In these 3 documents, marketing is positioned as a vital part in the marketing and sales process, and a distinction is made between strategic marketing and marketing communication, separating corporate responsibility from the operational execution. The STP-process is recognizable in these documents, even though different terminology is used. The documents mention market research as a first step in order to gain insight into possible target markets. This should be followed by the positioning of products and the development of a marketing communication plan. Emphasis is also put on the positioning of marketing as an integrated function within the organization. The documents suggest that if marketing were to be integrated into the central core of the organization, the chances of a successful marketing strategy would increase. The document 'Re-orientation on marketing' (Table 1, no. 13) contains a proposal with regard to the position of the organization's marketing function in relation to adjacent functions such as Sales, Communications and Human Resource Management (HRM). The document states its goal as being: 'the ambition to strengthen the market orientation abilities of a mental healthcare provider'. Furthermore, one document was found which included a first draft for a marketing plan for one of the organization's divisions (Table 1, no. 11). In this document the different steps of the STP-process[5] are apparent and there is a mention of applicable instruments. However, at the time of the analysis, this plan was not yet finalized.

The documents 6, 8 and 9 (Table 1) describe a vision with regard to marketing communication activities. It is mentioned in these documents that the organization should focus on transparency

towards stakeholders. The variety of products the organization offers calls for a clear positioning in different market segments, demonstrable added value, the positioning of different 'brands' and the tailoring of communication activities. The elements of the STP-process are clearly recognizable in this suggestion, although not labeled as such nor mentioned in any specific order. The documents also refer to the 'corporate stakeholder policy plan' (Table 1, no. 7), in which the relationship with stakeholders is the central theme and in which instruments are discussed for analyzing stakeholder demands, performance gaps and stakeholder salience.

Processes and effects with regard to the STP-process

The portfolio analysis projects offer the organization an instrument that can, in theory, be used to research (the position of) their supply within different market segments (segmentation). Both presentations on the results of the portfolio analyses incorporate information on a relatively small number of variables on market attractiveness and business attractiveness. Knowledge that this generates includes: number of patients from outside the region, turnover rates (and share for each product), costs and personnel in relation to the products. The explanation for the choice of using the above mentioned variables for the log has to do with the aspects that GGzE considered most relevant in relation to the objectives in the multiyear policy plan 2013-2016 (Table 1, no. 14). Data was extracted from internal databases. In these analyses, no external resources were used due to time constraints, however the addition of such information about the supply market in mental healthcare, competitors, and how the organization's services are valued is considered worthwhile.

Certain policy documents take a clear stance on the subject of a strategic function of marketing in a mental healthcare organization (Table 1, no. 10 – 13). These related policy proposals, however, were at the time of writing, not fully incorporated into the organization's continuous business processes. The goal of the Marketing and Sales manager's MBA thesis (Table 1, no. 1) was to develop a marketing strategy for one of the organization's business units. Although this did not lead directly to strategic choices being made regarding the positioning of the business unit, the document provides a basis for future development. In the multiyear policy plan (Table 1, no. 14) the organization's strategic choices are described and objectives are formulated. Although a direct link between strategic analyses and a marketing strategy to effectively pursue these strategic choices could not be found, the 'targeting' phase of the STP-process is still clearly discernible in this document.

The awareness of and importance of a strategic marketing policy for mental healthcare providers in the near future is emphatically acknowledged in our case study. However, the results of the log and interview also show that time and resources are limited to be able to fully implement this as a corporate function. An environment that is constantly asking for a prompt reaction to changes has led the organization to look for quick wins. This resulted in a more pragmatic approach of the portfolio analyses, which was based on available (quantitative) information rather than on information that was, at least in theory, thought to be 'needed'. In the second portfolio project (2013),

the improvement of the information systems within the organization to generate management information and the engagement of a project manager to lead the project proved advantageous. The documents and the log however show us that, in practice, it still proved difficult to execute all steps of the portfolio analysis in the proper order and to attain all the necessary and relevant information. The results also show that more recently, the Communications manager and two staff members are now involved in a number of the marketing activities. However, the development of a marketing policy for the organization is still mainly a responsibility of the Marketing and Sales manager.

The interview results point to there being a need for the development and structural use of applicable instruments (e.g. portfolio analysis) in policy preparation. The interviewee claims that mental healthcare providers are at the start of their learning curve in this area, and that they need to take an increasingly critical view of their own performance. At this time, the marketing function is only laboriously accepted in the mental healthcare sector. The interviewee expects there will be fundamental changes in the coming years. Mental healthcare organizations are focusing on becoming centers of expertise, and health insurance companies will become more selective in their healthcare procurement.

Discussion

Our study outlines the first steps of the Segmentation – Targeting – Positioning (STP)-process for developing a marketing strategy at GGzE. The next step would be the growth of marketing into a mature corporate business function. The results of this study point to a lot of effort being put into the *segmentation* phase, by means of applying portfolio analysis. In theory, this should yield a clear picture of the organization's market position (Figure 1). To further refine this, the inclusion of external information in the portfolio analyses is recommended for future projects in this area. The organization can use the six steps that are mentioned by Gelderman and Van der Hart[12], and Mandour *et al.*[13] for future portfolio analyses, of which the scoring of different products, drawing a matrix and using this for strategy development were not found in the results of our case study. From the multiyear policy plan it can be deduced which market position the organization occupies. Portfolio analysis could be used in future policy plans to underpin the assumptions made about the market position. At this time the implicit effects of *targeting* and *positioning* were certainly found in our study, mainly in the multiyear policy plan, but these did not ensue from the use of instruments mentioned in the literature[7,14] nor from earlier steps in the process. Utilization of this process could prove valuable to identify considerations which validate specific strategic choices.

Several documents contain suggestions on the application of instruments within the STP-process. The Marketing and Sales manager of GGzE has written policy documents in the last 1.5 years, in which the positioning of the Marketing and Sales department is deliberated and in which strategic marketing is presented as an essential part of the corporate strategy. These documents

need further elaboration and choices will need to be made on how to incorporate these ideas into a corporate marketing policy. The Marketing and Sales manager stated in the interview that current budget restrictions in mental healthcare mean that there is limited time and resources for marketing activities. Furthermore, the diversity of products of an integrated mental healthcare provider, like GGzE, may result in multiple strategies being needed. In the documents we find this is a reason to adopt marketing communication strategies for different 'brands'. The diversity could however also be the reason why a corporate strategy is not easily found, because multiple (marketing) strategies for all the different products need to be developed. It seems plausible that smaller organizations, that tend to have a more focused, less diverse service supply, will find it easier to develop a corporate marketing strategy. Besides limited time and resources the mental healthcare sector also has a history of budget guarantees. Up till this time market forces have not led to a revolution in mental healthcare, but rather to a gradually changing environment. This could explain why mental healthcare providers do not as yet pursue a strategic marketing policy. From looking at the different initiatives that are visible within GGzE, it would appear the sense of urgency is mounting.

A limitation of this study is that it focused on a single case study performed within one single organization. However, the interview results would seem to suggest that the results of our study are not unique to this specific mental healthcare provider. The particular organization in our case study is a large, integrated mental healthcare provider, of which the organizational structure, patient population and diversity of services are comparable to other large mental healthcare providers in the Netherlands. In the interview in our case study the Marketing and Sales manager stated that in large mental healthcare organizations a marketing function is evident in organization charts, but that this is generally the responsibility of one individual rather than of a mature business department. In addition, the mental healthcare sector as a whole is facing significant budget restrictions. This scarcity means there are limited investment possibilities in functions such as marketing. To verify this assumption, an interview or questionnaire could be sent to these other large mental healthcare organizations, asking them to indicate the maturity of their marketing and sales function. In a similar study, research was done by the European Institute for Brand management[25] into the extent to which large mental healthcare providers in the Netherlands engage in marketing and communication activities. Their research shows that only 25% of Dutch mental healthcare providers have a specific marketing and brand policy and a specialized department within the organization for these activities. Furthermore, most organizations do not have a corporate 'story' or perform stakeholder analyses. A third of the participating organizations in EURIB's research state that strategic positioning of the organization is not clearly defined. Limited funds for these activities are mentioned as the main reason for these results.[25] Based on this research from EURIB,[25] it may be deduced that GGzE leads the field of large mental healthcare providers regarding the development of marketing related activities. If this is indeed the case needs to be verified before any firm conclusions can be drawn.

Conclusion

In conclusion we determined that several instrumental steps, related to the STP-process,[5] to develop a marketing strategy in mental healthcare have been taken. The sense of urgency is rising, and for the coming years it will be vital to consider how to follow through with the development of a corporate marketing strategy. However, mental healthcare providers are faced with limited time and resources, and are still in the process of developing information systems to generate all the information that is needed. It is therefore difficult at this time to draw conclusions about the added value of the application of instruments on the development of a marketing strategy in a mental healthcare organization. Further exploration is needed in this field, including a reflection on the approach other mental healthcare providers have chosen in this area. As has been proven in the for-profit sector, the use of instruments is, in theory, vital for the development of marketing strategy with which an organization can manifest its added value.[7,8,23] With regard to the STP-process this would mean that research into the market segments the organization is operating in is the first step.[5] Developing a marketing strategy is only feasible when enough knowledge is available about the organization's products or services in relation to what is being offered by other suppliers. Portfolio analysis would be a suitable instrument to perform this step in the process. Other instruments the STP-process utilizes still need to be explored in the practice of mental healthcare providers.

References

1. Slobbe LCJ, Smit JM, Groen J, Poos MJJC, Kommer GJ. Cost of illness in the Netherlands 2007: Trends in healthcare expenditure 1999–2010. Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu (National Institute for Public Health and the Environment); 2011.
2. Ministry of Health, Welfare and Sports. Voornemens curatieve GGZ. Pub. L. No CZ/FBI 3066636 (10 June 2011).
3. Van Dorresteijn M. CZ gaat GGz-zorg selectief inkopen [document on the internet]. 7 June 2013 [cited on 16 May 2013]. Available from http://www.zorgvisie.nl.
4. CZ Zorgverzekeraar. Zorginkoopbeleid Gespecialiseerde GGZ 2014. Tilburg, the Netherlands: CZ; 2013.
5. Kotler P, Shalowitz J, Stevens RJ. Strategic marketing for health care organizations: building a customer-driven health system. San Fransisco, CA: Jossey-Bass; 2008.
6. Poiesz T, Caris J. Ontwikkelingen in de zorgmarkt, een strategische analyse. Deventer: Kluwer; 2010.
7. Treacy M, Wiersema F. The discipline of marketleaders. Target your customers, narrow your focus, dominate your market. New York: Basic Books; 1995.
8. Frambach R, Nijssen E. Marketingstrategie, breaking the rules. Groningen/Houten: Noordhof Uitgevers; 2009.
9. Bridges JF, Terris DD. (2004). Portfolio evaluation of health programs: a reply to Sendi et al. Soc Sci Med 2004;58(10):1849-1851.
10. Drain M, Godkin L. A portfolio approach to strategic hospital analysis: exposition and explanation. Healthc Manag Rev 1996;21(4):68-74.
11. Sendi P, Al MJ, Rutten FFH. Portfolio theory and cost-effectiveness analysis: a further discussion. Value Health 2004;7(5):595-601.
12. Gelderman CJ, Van der Hart HWC. Business Marketing. Heerlen/Houten, the Netherlands: Open Universiteit/ Educatieve Partners Nederland; 2000.
13. Mandour Y, Bekkers M, Waalewijn P. Een praktische kijk op marketing- en strategiemodellen. Den Haag, the Netherlands: Sdu Uitgevers; 2005.
14. Zeithaml VA, Bitner MJ, Gremler DD. Services marketing, integrating customer focus across the firm. Boston: McGraw Hill; 2009.
15. Deshpandé R, Farley JU, Webster FE Jr. Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis. J Mark 1993;57:23–7.
16. Kohli AK, Jaworski BJ. Market orientation: the construct, research propositions, and managerial implications. J Mark 1990;54(2):1–18.
17. Narver JC, Slater SF. The effect of a market orientation on business profitability. J Mark 1990;54(4):20–34.
18. Bhuian SN, Abdul-Gader A. Market orientation in the hospital industry. Market Health Serv 1997;17(4):36–45.
19. Kotler P, Clarke RN. Marketing for health care organizations. Englewood Cliffs: Prentice-Hall; 1987.
20. Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen (GGzE). Jaardocument 2012. Eindhoven: GGzE; 2013.
21. Strauss A, Corbin J. Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, CA: Sage; 1998.
22. Altrichter H, Holly ML. Research diaries. In Somekh B, Lewin C (Eds.). Research methods in the social sciences. London, Sage publications; 2005.
23. Porter ME. The five competitive forces that shape strategy. Harv Bus Rev 2008;86(1):78–93.
24. Ansoff I. Strategies for Diversification. Harv Bus Rev 1957;35(5): 113-124.
25. European Institute for Brand management. EURIB onderzoek naar communicatie en marketing bij GGz-instellingen. Rotterdam, the Netherlands: EURIB; 2012.

Chapter 7

Discussion and conclusions

Introduction

Research on strategic market orientation is extended when examining the literature on business administration, marketing and management. In most cases this literature refers to organizations in the 'for profit' sector.[1-8] Recently, however, strategic market orientation has become an increasingly important issue in the healthcare sector.[9-11] System changes have led to a deregulation in healthcare and the emergence of a more competitive healthcare market.[12] These developments also apply to the mental healthcare sector, that requires a more market-oriented approach and further professionalization in the field of marketing and sales of mental healthcare providers.

Following these developments, the research presented in this thesis promotes more evidence-based decision making in mental healthcare, based on knowledge related to strategic market orientation. Within our research the aim was to improve the general understanding of strategic market orientation in mental healthcare, by developing and applying instruments within this field in one specific mental healthcare organization.

For this purpose, we performed a study for which we formulated two research questions:

1. Which instruments can be used to perform strategic market orientation in mental healthcare?
2. To what extent are these instruments applicable in the practice of mental healthcare providers?

To answer the research questions, first a theoretical and field exploration were done to gain knowledge on strategic market orientation and possible instruments in this field that can be applied by mental healthcare providers. This was followed by an empirical exploration of four case studies originating from a mental healthcare provider in the southern part of the Netherlands: *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE). In these case studies, specific questions in the field of strategic market orientation in mental healthcare were studied at GGzE. The results of these case studies are the foundation for assessment of the applicability of instruments within strategic market orientation to mental healthcare providers, both overall and within each separate domain. This comprehensive knowledge on strategic market orientation forms the basis for more evidence-based decision making in mental healthcare. This led to the outline for this thesis, as presented in Figure 1.

Development of a knowledge synthesis on strategic market orientation in mental healthcare

This study originally started with the aim to develop a model that would enable a mental healthcare provider to continuously dispose of information about mental healthcare demand to support a better match between demand and supply in regional mental healthcare. Initially, the main impetus for this research was the increasing impact of market forces in mental healthcare in the Netherlands, and the fact that budgets were becoming less secure. Knowledge and more evidence about the actual and future needs in mental healthcare were seen as a precondition to develop a

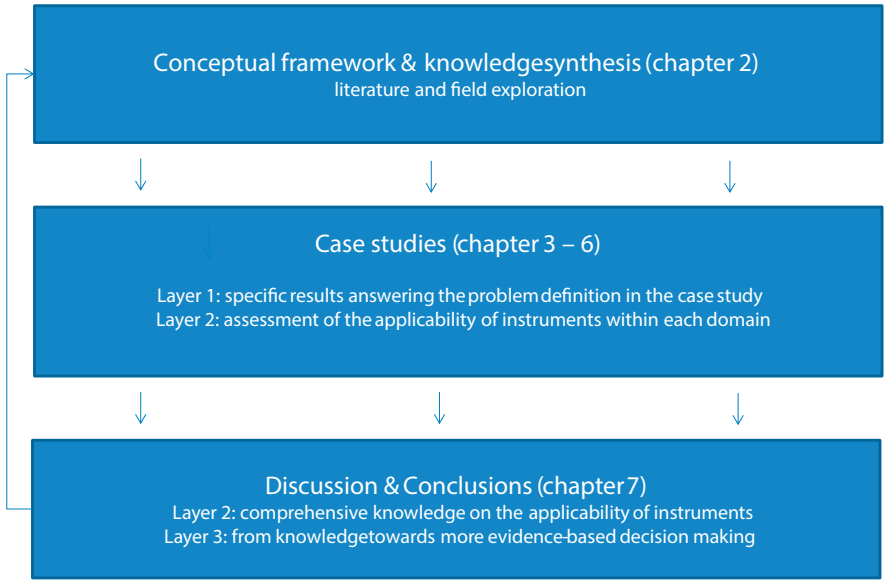

Figure 1 Outline of the thesis

'palette' of healthcare supply that would be supported by healthcare financiers.

In our search to operationalize the concept 'mental healthcare demand', we found a diversity of definitions, measuring methods, and practical elaborations.[13-21] In particular, it became clear that knowledge about 'demand' would not suffice for the development of a market-oriented mental healthcare approach. In the literature we found different models for market orientation, all of which mention the central position of customer demand but emphasize the importance of taking into account the role of other domains in this field: suppliers, stakeholders, and external developments.[5-10] This shifted the focus of our research from 'developing a model to gain knowledge about mental healthcare demand' to 'developing a model to gain knowledge about the mental healthcare market'. In the literature this is referred to as 'strategic market orientation'.[6-8] The activities within this concept are also called 'market research'.[3,4,11]

Having established the focus of our research, the objective was to explore the possibilities to develop and apply a set of instruments to enable mental healthcare providers to gain more knowledge about their specific market. An initial literature search on strategic market orientation revealed four domains: mental healthcare demand, mental healthcare supply, stakeholders, and the external environment. To further examine these domains we performed a theoretical and a field study to gain knowledge about the interpretation of these domains, the availability and use of information, and the use of instruments. Together this formed the foundation for a knowledge synthesis on strategic market orientation in mental healthcare (described in Chapter 2). Table 1 provides a summary of this knowledge synthesis.

Table 1 Knowledge synthesis: a summary (adapted from Table 1 in Chapter 2)

Mental healthcare demand	**Mental healthcare supply**
Interpretation: Care service in use, Patient characteristics to determine influencing factors (patient profiles)	*Interpretation:* Market position, Product portfolio, Competition/other suppliers, Added value, Marketing strategy
Information: Electronic Patient Records (EPR) on care service in use, Routine Outcome Measurement (ROM) questionnaires on patient factors	*Information:* Organizational units to identify 'products', Registration data on production/turnover, costs and personnel, Limited data on quality indicators
Instrument used: Audience segmentation	*Instrument used:* Portfolio analysis
Stakeholders	**External environment**
Interpretation: Different stakeholder groups, Stakeholder expectations and demands, Matching performance and stakeholder expectations	*Interpretation:* Developments (demographic, economical, societal, political) Scenarios for the future
Information: Contact information of different stakeholders, Stakeholder expectations by questionnaire, Internal reflection by interviews	*Information:* Trends (external information) Uncertainties by combining internal and external perspectives
Instrument used: Stakeholder management process model	*Instrument used:* Scenario analysis

Although the basis for the knowledge synthesis on strategic market orientation was found in (international) business literature, the instruments in the knowledge synthesis are *generic* in nature and should therefore also be applicable in healthcare sectors other than mental healthcare. Indeed, these instruments are grounded in fundamental research in the area of strategic market orientation and form a basis for applying this field of research in any business sector. Because of their generic character, these instruments are suitable for exploration in an area where strategic market orientation is relatively new, i.e. the mental healthcare sector. This does however not imply that other suitable instruments would not be available or applicable. Innovative new approaches towards strategic market orientation should be the focus of future exploration, which could lead to a further development of the basic instruments of strategic market orientation in mental healthcare, as they are now discussed in this thesis. Exploring and applying these instruments should be an iterative process leading to continuous learning on the best way to apply strategic market orientation in mental healthcare organizations. Besides the practical value of adapting and improving these instruments, there is a scientific value because it offers new practice-based evidence regarding the application of theoretically based knowledge and instruments.

A mental healthcare provider needs to be able to integrate scientific and practice-based evidence within and overarching the domains of the knowledge synthesis. This means that

continuous research in this area is necessary. Within the four domains of strategic market orientation, there are various scientifically tested business models that could also be applicable in a mental healthcare setting.[22-25] To assess this applicability, a mental healthcare provider should be aware of the practical implications of using such a model, i.e. the interpretation of strategic market orientation in mental healthcare, the information that is needed versus the information that is available, and the practical impact the use of instruments has on the resources and business processes of the organization.

This knowledge synthesis on strategic market orientation served as the conceptual framework for further practical exploration of a set of instruments for mental healthcare providers to integrate strategic market orientation in their policy processes. For this practical exploration, further operationalization of the concepts and application of the market orientation instruments was performed using four case studies at GGzE. The results of the case studies are discussed in the following section.

General reflection on the main results of the case studies

Introduction

To develop knowledge that stimulates mental healthcare providers towards evidence-based 'wisdom' in strategic policy development, the results of each case study should be reflected on from two perspectives: the overall contribution of the application of the instruments that are used within each of the domains in strategic market orientation to more evidence-based decision making regarding (strategic) market positioning, and the specific knowledge that is brought forward by the actual application of the instrument in each case study. Furthermore, we will reflect on each of the case studies regarding the 'gap' that can be found between the theoretical approach of using instruments within strategic market orientation versus the actual application in practice. Finally, within this paragraph we reflect on the instruments that are used in the case studies, the arguments for and against using these instruments and possible future alternatives that need further exploration.

Mental healthcare demand (Chapter 3)

On the level of strategic market orientation in mental healthcare, the results of using audience segmentation lead to a general understanding of how mental healthcare demand can be identified, which contributes to more 'evidence' regarding the strategic choices of a mental healthcare organization. However, to be able to anticipate (instead of explain) mental healthcare demand, more information may be needed about latent mental healthcare demand, about developments that influence mental healthcare demand, and about factors that determine whether a need for mental healthcare becomes manifest. Furthermore, it should be considered that mental healthcare demand can be seen from a broader perspective than only the patient. There can also be a demand for mental healthcare by stakeholders, financiers and society as a whole. For this reason,

future research should focus on incorporating these other areas of mental healthcare demand. In addition, the identification of patient demand cannot be seen separately from the other domains of strategic market orientation in which the above issues are addressed. The specific case study results show that guidelines are offered to managers about how to decide on extramuralization for a specific group of patients, which stimulates more evidence-based decision making within a specific problem area a mental healthcare provider is facing.

Mental healthcare demand is interpreted in literature as the prevalence and incidence of psychiatric disorders, the need for (psychiatric) care, the manifest demand for or use of mental health services, and the factors that influence this.[14,26,27] In practice, identifying mental healthcare demand appeared to differ from this definition that suggests that mental healthcare demand should also consider a patient's *need*, rather than actual and explicit care demand. In the case study we looked at patient characteristics and the extent to which this could explain their mental healthcare needs, relying on data that is available from registered patients, in other words, *care service in use*. With this interpretation of mental healthcare demand we are able to identify the current mental healthcare population at a particular moment in time. For mental healthcare providers this means that the expected patient demand can be estimated based on epidemiological data and patient profiles can clarify, instead of predict, mental healthcare demand of certain groups of patients. It thus appeared from the case study that practical application of definitions of mental healthcare demand is at the moment mainly dependent on data about care service use.

In this case study we used audience segmentation as an instrument to clarify mental healthcare demand for a specific group of patients in mental healthcare. Audience segmentation is a basic technique that is seen in social marketing to divide a group of people into homogeneous subgroups,[22,28,29] which in this case can be identified as patient profiles. The identification of latent patient needs or mental healthcare demand in other areas (for example stakeholders, financiers and society) will require different approaches and most likely additional instruments within this domain of strategic market orientation.

Stakeholders (Chapter 4)

To contribute to more evidence-based decision making regarding strategic policy making, this case study provides a first step to improve stakeholder management in the practice of a mental healthcare provider. However, it is essential that continuation and evaluation is guaranteed on this issue and that actual strategic decisions regarding this topic are made. It should also be acknowledged that the instrument is a time consuming instrument and dependent on the response of stakeholders. It would likely be most successful if stakeholder analysis is applied periodically at the beginning of a new multiyear policy cycle. It would furthermore be advisable to keep contact information continuously up to date and to monitor expectations of stakeholders on a regular basis by asking them actively about their view on the organization's performances. The specific results of the case study led to an expansion of knowledge on stakeholders and a stakeholder policy plan

for the organization at the moment that the study was performed. On a short term, knowledge was developed that facilitated the organization to strategic decisions regarding stakeholder management at that time.

In theory, stakeholders are defined as groups of organizations, with which an organization has an interdependent relationship.[30-32] Examples of stakeholders of a mental healthcare provider are financiers, supply chain partners, governmental authorities and patients. The definition regards stakeholders as external parties, whereas literature also captures internal and interface stakeholders.[30-32] In the case study, stakeholder management as part of strategic market orientation, is interpreted as the gathering of information about the expectations and influence of different stakeholders and the match or discrepancy with the organization's performance. In practice this information is not continuously available and is not a primary focus of most mental healthcare providers. To gain knowledge on the stakeholders of a mental healthcare provider, the model of Preble[23] was adapted and assessed in the case study. The information that was then gathered mainly relied on internal reflections about how the relationship with stakeholders can be valued. It would be beneficial to a mental healthcare provider to gather more routinely information about stakeholders' views on the organization to be able to instantly adapt to their expectations if considered necessary.

In the case study the stakeholder management process model[23] was used as a basic instrument, while it appeared to comprise the different steps that were considered needed for stakeholder analysis. With regard to this model there are two possible purposes for a mental healthcare provider: 1. using information from a stakeholder analysis to gain knowledge on which policy choices would most address the expectations of the organization's stakeholders, or 2. actively involving stakeholders in strategic policy making of the organization (co-creation). In this case study the first purpose is addressed, whereas the second purpose would be more conducive to evidence-based decision making regarding this domain of strategic market orientation. To achieve this, the instrument that is now used should be further evaluated and adapted and other possible instruments need to be explored.

External environment (Chapter 5)

Exploring the external environment to enhance more evidence-based decision making is a very essential part of strategic market orientation. This exploration provides knowledge about both (macro) influential developments that can be considered certain, and possible images that are realistic but not certain (scenarios), which is an addition to the knowledge that comes forward from mathematical forecasting tools. To actually use this knowledge effectively, the organizations that are involved in the scenario analysis need to be able to abstract from their personal preferences for one of the scenario's and to determine possible strategic choices for each scenario that is identified. In the case study, the specific aim was to develop different scenarios regarding the residence for people with mental health problems. Internal and external perspectives (chain partners)

were available to determine the uncertainties and eventually scenarios for future residential requirements. This enables mental healthcare providers to develop policy plans that take into account different future images, and create a shared decision making process regarding this issue.

The determination of different strategies regarding each of the scenarios is an issue that worked out different in the case study than it was originally intended in theory.[24] In practice, policy makers appear to be attracted by choosing one specific scenario to focus on and to develop a policy plan to realize this specific scenario. Furthermore, similar to the stakeholder analysis, the scenario analysis is an extensive work, which does not always fit the pragmatics of a mental healthcare organization that has to respond to fast sequences of changes in the sector. An extensive scenario analysis could be done each start of a new multiyear policy cycle. The instrument can however also be used in an adapted form, by leaving out extended document study and interviews, and capturing these steps in an additional workshop.

For the exploration of this domain of strategic market orientation, we specifically chose to use the basics of scenario analysis as an instrument for exploring this domain of strategic market orientation. It can be stated that also developments that are in fact certain should be taken into account in strategic market orientation.[33] Although scenario analysis also identifies developments within this category, they are not the basis for the scenarios to be developed. Mental healthcare providers should take this into account when applying this instrument. This can be captured in the first and second step of scenario analysis (exploring the external environment and the identification of key uncertainties). Furthermore, it should be acknowledged that scenario analysis is not the only possible way to anticipate future developments in the external environment. Johnson *et al.*[33] discuss three interrelated aspects for the anticipation to external developments of an organization: the identification of environmental influences (macro level), the determination of key-drivers for change, and the development of scenarios. This is a technique that takes into account multiple levels in the external environment (from macro to organizational).[33] The largest asset of scenario analysis is that it contributes to think 'out of the box' and reflect on uncertain elements instead of what we know is coming towards us. Ideally both perspectives are used additionally instead of choosing one particular approach, for which the model of Johnson *et al.*[33] can be very useful.

Mental healthcare supply (Chapter 6)

Within this domain of strategic market orientation, knowledge was developed that provided guidelines for more evidence-based decision making regarding the positioning of products of a mental healthcare provider. However, in the practice of a mental healthcare provider, it requires more structural use of instruments within this domain to effectively translate this knowledge into strategic choices regarding the market positioning of the organization. It also demands that additional information is available than is now the case. This was also visible in the case study at GGzE. The use of portfolio analysis has not led to a corporate marketing strategy and a continuous process of market research as part of the policy cycle. For this it would be needed to further explore

other instruments that can be linked to the STP-process.[34] Furthermore, customer demand and stakeholder influences, as well as external developments are relevant for effective, and even more evidence-based, decision making. It would therefore seem more logic to take into account all the domains within strategic market orientation before strategic choices regarding mental healthcare supply are developed.

Regarding the domain mental healthcare supply, the knowledge synthesis suggests that the development of a marketing strategy, based on the STP-process[34] is needed for mental healthcare providers to be able to prove their added value of their supply to customers and other stakeholders. In the case study the supply of mental healthcare services is seen as the extent to which a mental healthcare provider is able to develop knowledge on how its product portfolio is positioned in relation to the power of other suppliers within a particular market segment, and which added value is proposed in the marketing strategy. This definition brings forward a challenge for mental healthcare providers to gather information beyond the boundaries of the organization and to critically reflect on the quality and added value of their own products and services. In the case study we found that theoretical models to identify and analyze 'supply' are not easily implemented in the practice of a mental healthcare provider. It also appeared that much information that was needed according to the theoretical model, was not available in the case study, for example, data on product/market combinations and their added value compared to other suppliers. Contrary to theory, in practice, much information is generated from inside the organization and not gathered from external resources. This can be explained by the complexity of a sector in which information is not commonly shared, in which providers are considering mergers or other forms of formal cooperation and in which privacy issues are more common then in the for profit sector.

Within the domain 'mental healthcare supply', we identified several instruments and models within each of the steps of the STP-process[34]: portfolio analysis,[35,36] value disciplines,[37] and the 7 p's model of marketing.[38] In the case study, the use of portfolio analysis was further explored and has led to more knowledge on the organization's supply and the position of each product group within the organization, because this is the very basis for further positioning of mental healthcare supply. Because of the current blanks that appear in applying this basis instrument, it seems that further investment in data optimization is needed before the other instruments in the STP-process[34] can be used accordingly. Naturally, this does not imply that a mental healthcare provider cannot or does not make strategic decisions regarding their supply. However, it will take further time and effort to incorporate market research instruments in this area in the organization, and to establish that these decisions become more evidence-based.

Conclusion

The application of instruments of strategic market orientation in this study shows a contribution to more knowledge about the mental healthcare market, delivers guidelines for strategic choices regarding the market positioning of mental healthcare providers, and stimulates more evidence-

based decision making in mental healthcare. In this study the instruments are applied in multiple case studies at GGzE, however because they are generic in nature, they should be transferrable to the mental healthcare sector as a whole. When this translation is made, it is important to reconsider the current use of the instruments and adapt these to the appropriate context and abstraction level. This study does not pretend having established the set of instruments for strategic market orientation, rather it shows that the use of instruments in general contributes to more knowledge and more evidence-based decision making. The practice of a mental healthcare provider does not always fit the approach that is offered by theoretical models. This can be seen as a gap between science and practice. However, we prefer to interpret these differences from the perspective of evidence-based decision making as not only existing of science-based knowledge, but a continuous interaction and complementation between science-based and practice-based knowledge.[39]

A functional model for strategic market orientation in mental healthcare

Comprehensive knowledge on strategic market orientation in mental healthcare

In the four case studies, each of the domains of strategic market orientation is examined separately in detail. Each of the four instruments (audience segmentation, stakeholder analysis, scenario analysis, portfolio analysis) was applied in the context of one of the four domains (mental healthcare demand, stakeholders, external environment, mental healthcare supply). However, it is important to understand the 'sum of all parts' and be able to integrate knowledge from the separate domains (Table 1) into a body of comprehensive knowledge on strategic market orientation in the context of a mental healthcare provider. The comprehensive knowledge that can be extracted from the case studies in this research can be visualized in a functional model, presented in Figure 2. In this functional model, the different concepts from the knowledge synthesis are translated to actual 'activities' that should be performed by a mental healthcare provider to carry out strategic market orientation.

Mental healthcare providers often have a highly differentiated palette of supply, implying that different strategies may be needed to effectively position the organization in the mental healthcare market. Therefore, in preparation for strategic market orientation, the purpose of the intended market research and the target population should be clearly defined. Knowledge on the target population can be further specified by using audience segmentation to identify homogeneous subgroups. When the target population is specified, it is also possible to identify the relevant stakeholders for mental healthcare delivery to this group of patients, and to perform a portfolio analysis to identify the relative power the organization has in relation to other suppliers offering comparable or different products to the same target population. Furthermore, it is a prelude to further investigation of the external environment by, for example, scenario analysis.

The development of a marketing strategy is described in Chapter 6 as part of the domain 'mental healthcare supply'. However, it seems logical to detach this strategy from a specific domain and consider it as a result of information from all of the domains within strategic market orientation;

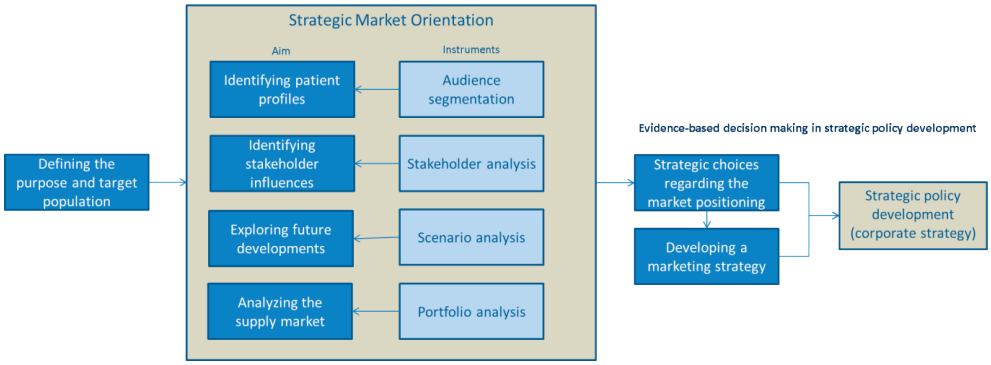

Figure 2 Functional model for strategic market orientation in mental healthcare

or, in other words, as a step that follows strategic market orientation as a whole, including making strategic choices regarding the market positioning of the organization. Moreover, it is a 'decision' on how to approach the market based on what is found in preparatory market research. Related to the different layers of this research, developing a marketing strategy can be seen as part of the development of more evidence-based decision making in strategic policy development by mental healthcare providers.

However, because the functional model is based on the application of the instruments in the field of strategic market orientation at a single mental healthcare provider in the Netherlands, the results should be interpreted with caution. Regarding the *generalizability* we refer to the first part of our research, the knowledge synthesis, for which we interviewed various (large) mental healthcare providers in the Netherlands. The results from these interviews imply that, at that time, the circumstances for (large) mental healthcare providers are comparable, consisting of, for example, budget cuts, increasing competition, a rising demand for healthcare, the economic crisis and technological developments. In almost all these organizations, activities in the field of strategic market orientation were somewhat limited. A study from the European Institute for Brand Management[40] confirms that marketing is still an 'upcoming' area in mental healthcare organizations and not embedded solely in corporate business. This implies that the use of instruments in strategic market orientation that was explored at GGzE may also be applicable and valuable for other mental healthcare providers in the Netherlands that are about to develop a marketing function within their organization. To gain more evidence about this expectation, further research is needed on the feasibility to reproduce these instruments at other mental healthcare providers. This initial exploration at GGzE provides important knowledge on the use and applicability of instruments within this field that can benefit other mental healthcare providers. The research focused on two layers: specific information regarding a problem setting at GGzE, and assessment of the applicability of instruments within a mental healthcare setting.

Added value of an integrated approach of strategic market orientation in mental healthcare

Examination of the different domains of strategic market orientation by means of four case studies led to specific knowledge within each of the domains and to a functional model (Figure 2). However, to understand the implications of strategic market orientation it is necessary to consolidate the separate 'parts' and integrate all the knowledge emerging from these different parts. Below, we discuss the added value of an integrated approach to strategic market orientation in mental healthcare.

The added value of an integrated approach to strategic market orientation lies in the compilation of information that is gained separately and in considering the influence of other domains on the interpretation of that information. Market analysis usually starts with determining the purpose and target population, and identifying the demand of this population. However, even when knowledge is available about the demand of mental healthcare patients, it is still unclear whether a mental healthcare provider can in fact organize healthcare supply for this population. This depends on several issues. For example, are other suppliers targeting this population, and how does the organization compete in terms of cost and quality with these other suppliers? How do financiers and other collaborating partners envision mental healthcare delivery for this specific group? And to what extent are external developments (e.g. economic and social change or technological innovations) factors that influence the future demand of these patients? These questions are relevant in determining which strategic choices are made concerning the positioning of products of a mental healthcare provider.

Also the supply domain of strategic market orientation is largely dependent on the other domains. For example, portfolio analysis aims at identifying the market attractiveness and business attractiveness (or business strength) of the organization's products. However, to apply this knowledge in strategic decision making, a mental healthcare provider also needs information on patient demand to prevent a mismatch between demand and supply. Portfolio analysis is based on the assumption that, at the starting point of such analysis, the organization has a clear view of this 'customer demand'.[25,35,41] In addition, this also requires knowledge on how financiers evaluate the services that are offered, and how they determine which organization offers the best value for money. Also, other stakeholders can be relevant in establishing intended services; for example, a housing corporation when the products depend on adequate residential facilities for patients. Finally, sector transcending developments, such as political measures for healthcare budgets and regulations, can also influence the process of mental healthcare delivery.

Besides the need to compile information from different sources to acquire an overall picture of the target market of a mental healthcare provider, the domains also have an effect on each other. For example, over time, external developments can change the patient profile of a mental healthcare population. Whereas demographics, income and social environment are examples of patient factors that influence mental healthcare demand, societal changes can have an effect on the mental health vulnerability of different groups and the care that is needed for their rehabilitation.

Another example is the influence of stakeholders on the development of mental healthcare demand and supply. The relationship (or image) a mental healthcare provider has with General Practitioners (GP's) can (to some extent) determine the mental healthcare demand of their patients. Currently there is a shift from specialized mental healthcare to primary (mental) healthcare; this could change the patient profiles because only the most severe illnesses will then be treated by specialized mental healthcare providers.

Thus, strategic market orientation consists of an interaction between the four different domains. Therefore, it is essential to have a comprehensive picture of the results of different market analyses. Knowledge becomes valuable only when a mental healthcare provider succeeds in having an overall view of the interrelated effects the different aspects of strategic market orientation have on each other.

Recommendations for practice: towards evidence-based decision making

The integration of knowledge from the different domains has led to more comprehensive knowledge on strategic market orientation and a framework for mental healthcare providers (Figure 2). The next step is to use this comprehensive knowledge to achieve more evidence-based decision making. To explain this, we refer to the layers within this thesis:

1. Specific results answering the problem definition that was posed by GGzE in each case study;
2. Generalizing these specific results to knowledge on the applicability of instruments within strategic market orientation for mental healthcare providers;
3. From knowledge on strategic market orientation towards evidence-based decision making in mental healthcare.

In our research the focus was on layers 1 and 2. First, we explored the extent to which instruments within strategic market orientation are available (knowledge synthesis), and then assessed their applicability for mental healthcare providers by using these instruments to answer specific problems in four case studies at GGzE. An important question that remains to be answered is how this knowledge can actually lead to strategic choices (and the development of a marketing strategy), in other words, to an 'understanding' of what actions to undertake? For a discussion of this third layer we refer to the knowledge hierarchy (Figure 3) that was introduced in Chapter 1. Within this knowledge hierarchy the concept 'understanding' is essential in transferring knowledge to wisdom, and the ability to use knowledge for organizational purposes.[42-48] It is reported that 'understanding' is crucial in all layers of the knowledge hierarchy, and it is essential to describe the knowledge that is needed and to link that knowledge to information, to be able to decode information in data, and vice versa.[43-45]

From knowledge on strategic market orientation towards evidence-based decision making

This study generated knowledge on strategic market orientation in mental healthcare by gathering

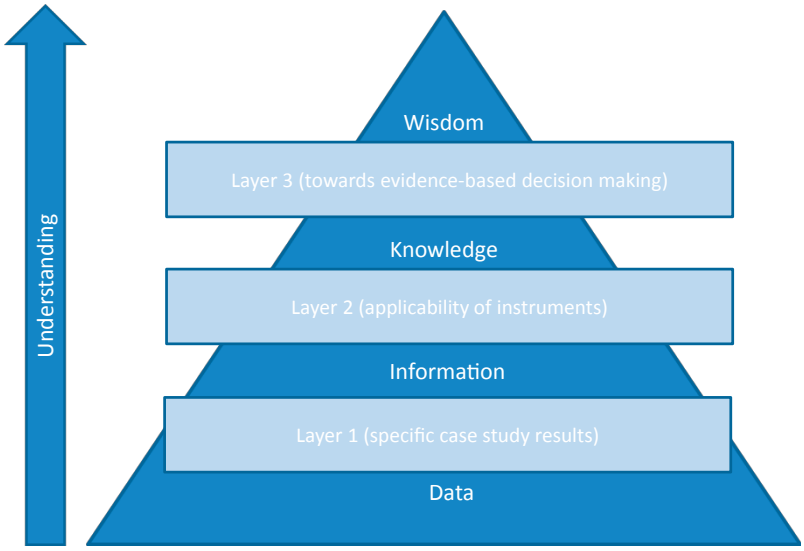

Figure 3 Knowledge hierarchy and layers of this research.

and interpreting information. This refers to the 'how' question in the knowledge hierarchy.[45] Theory states that this knowledge can only lead to effective strategic choices when the organization disposes of an understanding of this knowledge, which is also referred to as 'wisdom'.[42,43,45,48] This means that the organization should be able to answer the question 'why' this knowledge about strategic market orientation is relevant and 'why' a change should take place based on this knowledge.[45]

In this research the specific contribution to 'wisdom' for strategic policy development is provided by knowledge about strategic market orientation in mental healthcare. Strategic market orientation is however not the only field of knowledge that is needed for strategic policy development and for evidence-based decision making. Also human resources management, operations management and financial management are examples of areas in which knowledge is required to answer questions regarding strategic choices. These were however not included in the scope of our study.

Within this thesis we addressed the issue of being conducive to more evidence-based decision making by developing knowledge about how strategic market orientation can be approached in mental healthcare organizations. This knowledge was developed in different layers in the case studies. First, we addressed a specific question regarding each of the domains of strategic market orientation, which generated specific knowledge that is aimed at strategic decision making for a specific theme (for example: bed reduction policy, the development of a stakeholder policy plan). Besides this specific knowledge, we aimed to gain knowledge about the application of instruments of strategic market orientation, their feasibility in a mental healthcare organization, eventually

leading to strategic choices regarding the establishment of strategic market orientation as one of the corporate processes of the organization. The next step is to continuously use these instruments to collect 'wisdom' on various aspects that concern strategic market orientation and strategic decision making, and to do this by developing knowledge on different themes a mental healthcare provider faces (e.g. budget cuts, transition in youth mental healthcare, innovation).

There is an assumption that, before engaging in strategic market orientation, a mental healthcare provider should have a clear vision of the purpose and the target population in order to generate knowledge in this field.[42-48] Without clear objectives, the information that is sought will appear to be of limited value to the organization and will not lead to an understanding of the strategic choices that need to be made. Thus, the first step is to unambiguously formulate what is at stake and to explicitly state what the organization wants to know. This calls for a certain degree of wisdom regarding the knowledge that needs to be gathered and 'why' this is important.[45] This is particularly relevant for the mental healthcare sector, which operates within a dynamic environment in which it needs to anticipate and react to rapidly changing circumstances.

To understand the organization's underlying questions and their relevance, the transformation from data to information, information to knowledge, and knowledge to wisdom, is of major importance for mental healthcare providers. When the organization succeeds in transferring knowledge on strategic market orientation to wisdom, this leads to more evidence-based decision making in mental healthcare. This transition implies that the organization is challenged to integrate different fields of knowledge. In the literature, different knowledge fields for evidence-based decision making are reported: 1) science-based evidence from the best available research;[44,49] 2) practice-based evidence, including the practitioner's expertise;[44] and 3) local evidence about the context/environment of the organization.[49] For strategic market orientation within mental healthcare organizations, this means that different perspectives need to be explored to establish evidence-based decision making. From the results of this research we learn that the daily practice of a mental healthcare provider differs from what is found within theoretical models. This important finding emphasizes the relevance of integrating the different knowledge fields that are mentioned above. Whereas they are still relatively separate worlds, both science-based evidence and practice-based evidence are relevant.

First, the organization needs to find the available scientific evidence regarding the mental healthcare market and the specific segments in which they operate. However, to create a shared intelligence, not only scientific evidence is relevant. The organization needs to integrate this scientific evidence with the context within which the mental healthcare sector operates. This adds to the knowledge about how the market should be approached. Furthermore, the organization itself has many years of experience and expertise that is relevant to allow insight into the mental healthcare market. Thus, when a mental healthcare provider succeeds in developing knowledge based on strategic market orientation research (best available evidence), and is able to integrate this knowledge with knowledge on the most recent environmental developments and its own

organizational experience/expertise, this creates a shared knowledge base for evidence-based decision making.[44,49]

The development towards more evidence-based decision making based on strategic market orientation requires a shared intelligence within the organization, as well as a central team of experts able to translate knowledge to decisions on a strategic level.[50,51] This can be interpreted as the need to further invest in the development of a strategic marketing function in mental healthcare organizations, with a close connection to other departments to increase knowledge dissemination within the organization. To achieve this, the functional model for strategic market orientation should be further embedded within a central department or team of experts in the organization.

A challenge for mental healthcare providers

This research offers a first exploration of instruments in the field of strategic market orientation. These instruments appeared to be valuable to perform market analyses at one specific mental healthcare provider. Using this set of instruments, strategic market orientation should become an integral part of the strategic multi-year policy program of mental healthcare providers. In practice, it may be necessary to further adapt the use of the instruments to the context of any other mental healthcare organization. Further investment in marketing as a corporate function and department in the organization is needed to realize the aim to incorporate strategic market orientation within strategic policy planning. Furthermore, strategic market orientation should enter the 'genes' of the management of a mental healthcare organization. Besides having a corporate marketing department, also managers play a key role in translating corporate strategies to an operational level.

When strategic market orientation is embedded in a mental healthcare organization this can be conducive towards more evidence-based decision making. This means that difficult choices may need to be made, and market analysis can expose the (unexpected) market position of the different products of the organization. It takes courage to actually make the choice to take a different approach, based on results from strategic market orientation. The mental healthcare market is not like any other market in which growth is automatically generated when a product 'sells'. In mental healthcare this is more difficult, because budgets are partially regulated by the government. This means that, when choices are made to close down certain services, this is practically irreversible. On the other hand, a successful choice to invest in a specific product will not necessarily lead to financial benefits.

However, it would be difficult to organize mental healthcare without governmental regulation. Theoretical study on the effects of competition on the quality of healthcare shows that quality increases when prices are regulated.[52] However, whether non-regulated competition leads to higher quality remains debatable.[52] In addition, in the (mental) healthcare sector individual patients are not always capable of judging the quality of care they have received.[53] High quality

of care is, however, of vital importance for patients who are one of the most vulnerable groups in our society. Patients can benefit from more freedom of choice that results from market forces in mental healthcare. It also forces mental healthcare providers to be more critical about the quality and added value of their services, instead of being challenged in a price-based competition. When competition in mental healthcare results in higher quality of care without an increase in price, this will benefit individual patients and society as a whole.[53]

This implies that mental healthcare providers are increasingly challenged to be innovative and creative regarding their strategic choices. Strategic market orientation can be seen as part of the core business, which could mean that existing organizational processes and structures need to be rearranged.

Recommendations for further research

Further development on evidence-based decision making in the practice of mental healthcare providers needs to be accompanied by research. Also, the link between strategic market orientation and evidence-based decision making within mental healthcare needs further study.

This evidence should, for a large part, be found in the practice of a mental healthcare provider. Knowledge development relies on integrating the theory on strategic market orientation and applying this knowledge in practice. In turn, exploration of the sustainability of theory in the practice of a mental healthcare provider provides scientific evidence.[54] Follow-up research should aim at a further reduction of the gap between science and practice by applying the results of this study to elaborate on scientific validity through new research. This research should focus on the question how knowledge on strategic market orientation can be used for evidence-based decision making.

Also, the instruments themselves need further implementation and evaluation research, in which it should be questioned which criteria are important for successful implementation of these instruments, and which possible adaptations are needed. For example, it is worthwhile to establish if it is possible to use audience segmentation as an instrument to develop 'risk' profiles within the population, from which a group of *potential* patients could be identified. The technique is currently used as an explanatory model. Research on the predictive value of the technique could help to anticipate expected (future) mental healthcare demand, which would provide a more realistic basis for policy decisions and choices for innovation. Investigation of the external environment is of added value in developing these risk profiles, as the factors influencing mental healthcare demand are largely found in the external environment of potential patients. The usability of stakeholder analysis in mental healthcare could be further assessed by investigating the expectations of external stakeholders related to innovation projects, and the performance gaps with the objectives of a mental healthcare provider. In addition, knowledge on different suppliers should be an integral part of the determination of strategic choices. This shows that policy decisions can be cross-linked to each of the domains of strategic market orientation; this also underlines the need for an integrated

approach for effective and evidence-based decision making. Therefore, it is important to further strengthen the scientific evidence for an integrated approach to strategic market orientation.

Whereas the next step is to explore whether knowledge on strategic market orientation does in fact lead to a more market-orientated innovative approach and more evidence-based decision making, the subsequent question is whether a mental healthcare provider using instruments for strategic market orientation is more effective in its decision making, more innovative, and disposes of a better strategic position in the mental healthcare market. In the present study, because of the explorative nature of the research, we focused on a single organization. This is a legitimate approach in view of the limited evidence available at this time on the effects of strategic market orientation in mental healthcare.[55] To improve the validity of the results, to strengthen the scientific evidence for the application of strategic market orientation in mental healthcare and to be able to draw more generalizable conclusions, additional mental healthcare organizations should be included in future research in this area.

In practice, future research could lead to 'wisdom' about how to transfer knowledge on strategic market orientation into more evidence-based decision making. In this research we focused on exploring the first layers of the knowledge hierarchy (data, information, and knowledge), whereas future research may contribute to more evidence related to the top layers of the hierarchy: from knowledge to wisdom.

References

1. Ruzo E, Barreiro JM, Losada F. Competitive market analysis from a demand approach - An application of the Rotterdam demand model. Int J Market Res 2006;48(2):193-236.
2. Kress GJ, Snyder J, De Kluyver CA. Forecasting and market analysis techniques: A practical approach. Int J Forecasting 1996;12(1):179-180.
3. Witell L, Kristensson P, Gustafsson A, Löfgren M. Idea generation: customer co-creation versus traditional market research techniques. J Serv Manag 2011;22(2):140-159.
4. Maas P, Martin E. Hatching a New Identity - Market research breathes new life into an existing brand. Mark Health Serv 2009;29(1):8-13.
5. Webster RL, Hammond KL, Harmon HA. Market orientation toward various customer groups in business schools. Acad Mark Stud J 2005;9(1):67-81.
6. Narver JC, Slater SF. The effect of a market orientation on business profitability. J Mark 1990;54(4):20-34.
7. Kohli AK, Jaworski BJ. Market Orientation: The Construct, Research Propositions, and Managerial Implications. J Mark 1990;54(2):1-18.
8. Porter ME. The five competitive forces that shape strategy. Harv Bus Rev 2008;86(1):78-93.
9. Kotler P, Clarke RN. Marketing for health care organizations. Englewood Cliffs: Prentice-Hall; 1987.
10. Bhuian SN, Abdul-Gader A. Market orientation in the hospital industry. Mark Health Serv 1997;17(4):36-45.
11. Stevenson R. Welcoming people with mental health problems into mainstream market research. Int J Market Res 2011;53(6):737-748.
12. Van de Ven WPMM, Schut FT. Guaranteed access to affordable coverage in individual health insurance markets. In: Smith PC, Glied S (eds.). Oxford Handbook of Health Economics. Oxford: Oxford University Press; 2011.
13. Post D, Stokx LJ. Volksgezondheid Toekomst Verkenning 1997 VI Zorgbehoefte en zorggebruik. Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu (National Institute for Public Health and the Environment); 1997.
14. Andersen RM. Revisiting the behavioral model and access to medical care: Does it matter? J Health Soc Behav 1995;36(1):1-10.
15. Kovess-Masfety V, Alonso J, Brugha TS, Angermeyer MC, Haro JM, Sevilla-Dedieu C. Differences in lifetime use of services for mental health problems in six European countries. Psychiatr Serv 2007;58(2):213-220.
16. Alonso J, Codony M, Kovess-Masfety V, Angermeyer MC, Katz SJ, Haro JM, et al. Population level of unmet need for mental healthcare in Europe. Br J Psychiatry 2007;190(4):299-306.
17. Aoun S, Pennebaker D, Wood C. Assessing population need for mental health care: A review of approaches and predictors. Ment Health Serv Res 2004;6(1):33-46.
18. Hendryx MS, Ahern MM. Access to mental health services and health sector social capital. Adm Policy Ment Health 2001;28(3):205-218.
19. Kamperman AM, Komproe IH, De Jong JTVM. Migrant mental health: a model for indicators of mental health and health care consumption. Health Psychol 2007;26(1):96-103.
20. Bijl RV, Ravelli A. Psychiatric morbidity, service use and need for care in the general population: Results of the Netherlands Mental Health Survey and Incidence Study. Am J Public Health 2000;90 (4):602-607.
21. McAlpine DD, Mechanic D. Utilization of specialty mental health care among persons with severe mental illness: The roles of demographics, need, insurance, and risk. Health Serv Res 2000;35(1):277-292.
22. Slater MD. Theory and method in health audience segmentation. J Health Commun 1996;1(3):267-83.
23. Preble JF. Toward a comprehensive model of stakeholder management. Bus Soc Rev 2005;110(4):407-431.
24. Van der Heijden K. Scenarios: the art of strategic conversation. Chichester, UK: Wiley; 1996.
25. Drain M, Godkin L. A portfolio approach to strategic hospital analysis: exposition and explanation. Healthc Manag Rev 1996;21(4):68-74.
26. Post D, Stokx LJ. Volksgezondheid Toekomst Verkenning 1997 VI Zorgbehoefte en zorggebruik. Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu (National Institute for Public Health and the Environment); 1997.

27. Ten Have M, Vollebergh W, Bijl RV, De Graaf R. Predictors of incident care service utilisation for mental health problems in the Dutch general population. Soc Psychiatry Psychiatr Epidemiol 2001;36:141–9.
28. Boslaugh SE, Kreuter MW, Nicholson RA, Naleid K. Comparing demographic, health status and psychosocial strategies of audience segmentation to promote physical activity. Health Educ Res 2004;20(4):430-438.
29. Moss HB, Kirby SD, Donodeo F. Characterizing and reaching high-risk drinkers using audience segmentation. Alcohol: Clin Exp Res 2009;33(8):1336-1345.
30. Brugha R, Varvasovszky Z. Stakeholder analysis: a review. Health Pol Plan 2000;15(3):239-246.
31. Blair JD, Fottler MD. Challenges in Health Care Management: Strategic Perspectives from Managing Key Stakeholders. San Francisco: Jossey Bass; 1990.
32. Freeman RE. Strategic Management: A Stakeholder Approach. Boston: Pitman; 1984.
33. Johnson G, Scholes K, Whittington R. Exploring corporate strategy. Harlow, England: Prentice Hall/Financial Times; 2008.
34. Kotler P, Shalowitz J, Stevens RJ. Strategic marketing for health care organizations: building a customer-driven health system. San Francisco, CA: Jossey-Bass; 2008.
35. Gelderman CJ, Van der Hart HWC. Business Marketing. Heerlen/Houten, the Netherlands: Open Universiteit/ Educatieve Partners Nederland; 2000.
36. Mandour Y, Bekkers M, Waalewijn P. Een praktische kijk op marketing- en strategiemodellen. Den Haag, the Netherlands: Sdu Uitgevers; 2005.
37. Treacy M, Wiersema F. The discipline of marketleaders. Target your customers, narrow your focus, dominate your market. New York: Basic Books; 1995.
38. Zeithaml VA, Bitner MJ, Gremler DD. Services marketing, integrating customer focus across the firm. Boston: McGraw Hill; 2009.
39. Sackett DL, Rosenberg WMC, Muir Gray JA, Brian Haynes RB, Scott Richardson W. Evidence-based medicine, what it is and what it isn't [Editorial]. Br Med J 1996;312:71-72.
40. European Institute for Brand management. EURIB onderzoek naar communicatie en marketing bij GGz-instellingen. Rotterdam, the Netherlands: EURIB; 2012.
41. Sendi P, Al MJ, Rutten FFH. Portfolio theory and cost-effectiveness analysis: a further discussion. Value Health 2004;7(5):595-601.
42. Ackoff RL. From Data to Wisdom. J Appl Syst Anal 1989;16:3-9.
43. Rowley J. The wisdom hierarchy: representations of the DIKW hierarchy. J Inf Sci 2007;33(2):163-180.
44. Tuomi I. Data Is More than Knowledge: Implications of the Reversed Knowledge Hierarchy for Knowledge Management and Organizational Memory. J Manag Inf Syst 1999/2000;16(3):103-117.
45. Bellinger G, Durval C, Mills A. Data, Information, Knowledge, and Wisdom [document on the internet]. 2004 [cited 13 January 2009]. Available from: http://www.systems-thinking.org/dikw/dikw.htm.
46. Braganza A. Rethinking the data-information-knowledge hierarchy: towards a case-based model. Int J Inf Manag: J Inf Prof Arch 2004;24(4):347-356.
47. Grover V, Davenport TH. General perspectives on knowledge management: Fostering a research agenda. J Manag Inf Syst 2001;18(1):5-21.
48. Hicks RC, Dattero R, Galup SD. The five-tier knowledge management hierarchy. J Knowl Manag 2006;10(1):19-31.
49. Lewin S, Oxman AD, Lavis JN, Fretheim A, Garcia Marti S, Munabi-Babigumira S. (2009). Support tools for evidence-informed policymaking in health II: Finding and using evidence about local conditions Health Res Policy Syst 2009;7(Suppll): SII. doi:10.1186/1478-4505-7-SI-SII.
50. Rouach D, Santi P. Competitive Intelligence Adds Value: Five Intelligence Attitudes. Eur Manag J 2001;19(5):552–559.
51. Rodenberg JHAM. Slagkracht van de intelligence professional. Inf Prof 2002;6(9):18-21.
52. Gaynor M. What Do We Know About Competition and Quality in Health Care Markets?. Cambridge: National Bureau of Economic Research; 2006.
53. Halbersma R. Kwaliteit van zorg & marktwerking. Een overzicht van de economische literatuur. Utrecht: Nederlandse

Zorgautoriteit (NZa); 2008.

54. Bongers IMB. Dromen, denken, durven, doen en vernieuwen. Management van innovatie binnen de GGZ. Tilburg: Tilburg University; 2011.
55. Palinkas LA, Horwitz SM, Chamberlain P, Hurlburt MS, Landsverk J. Mixed-methods designs in mental health services research: A review. Psychiatr Serv 2011;62(3):255-263.

Summary

Introduction

In the Netherlands a large part (11.4%) of the total healthcare costs is spent on psychiatric disorders. A large increase in both the number of patients and costs of mental illnesses is encountered in the last decade. This has led to system amendments, budget cuts and a deregulation in mental healthcare. The result has been a more competitive market with decentralized power of health insurance companies, health consumers, and local authorities. For mental healthcare providers this means that a transformation from a controlling organization to a market organization is needed. This requires more knowledge on strategic market orientation and possible instruments to generate knowledge that is needed to anticipate developments in the mental healthcare market the coming years. In mental healthcare this is a relatively new area, which was an encouragement to start this exploratory research into the possibilities to develop and apply instruments for strategic market orientation in a mental healthcare organization. The knowledge that results from this research is meant to be an incentive for mental healthcare providers to effectuate more evidence-based decision making regarding their strategic choices in market positioning and consequently the development of a marketing strategy, as part of an overall corporate strategy.

Study design

The overarching aim of this research is to stimulate mental healthcare providers to increasingly perform strategic market orientation as an integral part of strategic policy development. For this purpose an exploratory study into the possible instruments for strategic market orientation was performed at *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE), a mental healthcare provider in the southern part of the Netherlands, based on two research questions:

1. Which instruments can be used to perform strategic market orientation in mental healthcare?
2. To what extent are these instruments applicable in the practice of mental healthcare providers?

A literature study and field exploration (interviews) were conducted to establish a framework for strategic market orientation at a mental healthcare provider (knowledge synthesis). In a multiple case study design, using both quantitative and qualitative research methods, the applicability of different instruments of strategic market orientation were explored at GGzE.

Knowledge synthesis

Strategic market orientation is described in literature as an activity an organization needs, in order to anticipate the market, for strategic positioning, and for the development of an effective marketing strategy. For this purpose an organization needs to gather knowledge about different domains of the market: customer demand, supply, stakeholders and the external environment. In mental healthcare this can be translated to: *mental healthcare demand, mental healthcare supply, stakeholders,* and *the external environment*.

There are different instruments available for strategic market orientation that are already established in fundamental business literature and in the practice of for-profit businesses. Based on the knowledge synthesis, four instruments were chosen for the empirical part of this research, which each address one of the domains: audience segmentation (mental healthcare demand), portfolio analysis (mental healthcare supply), stakeholder management process model (stakeholders), and scenario analysis (external environment).

In this research we designed four empirical case studies in which these instruments were further explored and applied in the practice of a mental healthcare provider (GGzE). The results of the case studies aim to provide specific knowledge regarding a problem definition, related to the field of strategic market, at GGzE, and provide an assessment on the applicability of the instruments for a mental healthcare provider.

Case study on mental healthcare demand

In this study the application of audience segmentation to increase demand oriented decision making in mental healthcare was explored. Audience segmentation is a technique, originating from social marketing to find homogeneous subgroups within a larger population. In light of the current discussion about the reduction of clinical beds in the Netherlands, GGzE was seeking knowledge to support their decision making process for which group(s) of patients it would be most sound to substitute intramural mental healthcare for ambulant alternatives.

In a mixed methods case study design audience segmentation was applied to develop patient profiles for patients that were at the time receiving intramural mental healthcare at the center for psychotic disorders at GGzE. The goal in the case study was twofold: 1. developing patient profiles to gain knowledge about the possibilities for clinical bed reduction, and 2. assessing the usefulness of audience segmentation as an instrument for more demand oriented decision making. For the first purpose, a literature search was performed to find supporting and impeding patient characteristics for clinical bed reduction in mental healthcare. Following this, a cluster analysis was conducted to find homogeneous subgroups within the target population. To address the second purpose of the case study, interviews were held on an operational, tactical and strategic level, to assess the applicability of audience segmentation.

The results of the literature review and cluster analysis led to three different patient groups, each of which had similar characteristics, that could be related to the deinstitutionalization debate: crisis group, serious problems, and hospitalized elderly. It appeared that the crisis group would be the most natural group for substitution to more extramural treatment, by reducing the number of hospitalized days of these patients. The usefulness of audience segmentation to reveal patient profiles and to use this information for decision making purposes regarding clinical bed reduction is recognized on an operational, tactical en strategic level. It is also acknowledged that using this instrument can contribute to more demand oriented decision making in mental healthcare.

Case study on stakeholders

In this case study the applicability of a comprehensive model for stakeholder management at a mental healthcare provider was researched. According to the literature, stakeholder management can contribute to a better understanding of mutual expectations, and an improvement of the relationships between the organization and its stakeholders. This is especially relevant in current times where the many transitions in mental healthcare require a more intensive collaboration between a mental healthcare provider and its stakeholders, and at the same time increase the interdependency between these organizations.

The assessment of the applicability of a model for stakeholder management was conducted at GGzE in light of the ambition to develop a corporate stakeholder policy plan for the coming years. This assessment was performed in two research parts: 1. stakeholder analysis as described in the model (stakeholder identification, identification of stakeholder expectations, determination of performance gaps, determination of stakeholder salience) were executed at GGzE, and 2. a process and effect evaluation was done to assess the applicability of the model. For the first research part data was gathered with literature research, questionnaires and interviews with both stakeholders and internal respondents. Log registration and interviews with managers of GGzE were conducted for the second part of the case study.

The stakeholder analysis resulted in the identification of eight stakeholder groups, each with different expectations regarding GGzE. Stakeholders generally find the collaboration with a mental healthcare provider 'sufficient'. Finally, five stakeholder groups are seen as 'definite' stakeholders by GGzE. Regarding the second purpose, the assessment of the applicability, an important finding is the time-consuming nature of stakeholder analysis. The effectiveness would furthermore be improved if the perspectives of stakeholders were more involved in the analysis. Stakeholder management is seen as very valuable in order to create different communication strategies for each stakeholder group. In conclusion, it appeared that, provided that the model is properly adapted for the specific field, the analysis can provide more knowledge on stakeholders and can help integrate stakeholder management as a comprehensive process in policy planning of a mental healthcare provider.

Case study on external environment

The applicability of scenario analysis to explore and anticipate the external environment of a mental healthcare provider was assessed in this case study. Scenario analysis is an instrument with which different (multi-level) environmental developments are identified, after which the key uncertainties are determined to lead to four different realistic, but uncertain scenarios. The actuality of clinical bed reduction and the forthcoming question how to organize residence for people with mental healthcare problems in Eindhoven, was studied for GGzE and a number of regional collaborative partners.

A scenario analysis was performed at GGzE in four steps. First, the external environment was

explored by a document study and interviews. The second and third step (the identification of key uncertainties and the development of scenarios) were executed in a workshop with an expert panel consisting of participants from mental healthcare providers, public housing corporations, and local government.

This resulted in four scenarios: 1) Integrated and independent living in the community with professional care; 2) Responsible healthcare supported by society; 3) Differentiated provision within the walls of the institution; 4) Residence in large-scale institutions but unmet need for care. From this, policymakers of different collaborative partners were able to work out concrete guidelines for further policy development regarding residence for people with mental health problems on a regional level. The participants of the workshop stated that the scenario analysis had been very useful to think out of the box and to see possible future images that were not considered before. The results of the scenario analysis were used in the following policy plan discussions. A pitfall appeared to be that in practice scenario analysis can lead to a preference for one of the scenarios that is found, resulting in policy measures to anticipate on one particular scenario. Keeping this in mind, the study has shown that scenario analysis is applicable in the practice of a mental healthcare provider and can lead to useful guidelines for planning organizational strategy when applied as it is meant.

Case study on mental healthcare supply

The interpretation of 'mental healthcare supply' appeared to be relatively diverse in literature and in the practice of mental healthcare providers. In general, the 'supply' domain of strategic market orientation is closely associated with the process of segmentation, targeting and positioning (STP-process). In addition to the other domains, it is essential to determine the organizations portfolio, market position among other suppliers and translate this into strategic choices and a marketing strategy.

In this case study the professional growth within this area of strategic market orientation at GGzE from 2009 onwards was evaluated, by assessing the use of instruments within this domain and the possibilities these instruments offer for the development of a more mature business in strategic marketing. For this purpose a document analysis, log analysis, and an interview were performed.

The results of the case study show that several instruments within the STP-process were explored from different perspectives, of which portfolio analysis was, accordingly to the outline of this study, applied two times in preparation of the (yearly) strategic dialogue between the corporate board and the division directors. Both presentations on the results of the portfolio analyses incorporated information on a relatively small number of variables: number of patients from outside the region, turnover rates (and share for each product), costs and personnel in relation to the products. The following steps of the STP-process (targeting and positioning), as appeared from the results, are not yet a direct result from using portfolio analysis as a market orientation instrument. Regarding the

applicability of portfolio analysis, as part of the STP-process it was found that portfolio analyses can contribute to more sound policy choices regarding mental healthcare supply and the development of a marketing strategy. However, in practice this transition is not yet explicitly visible. There are two main explanations: 1. more complete information is necessary to perform portfolio analysis the way it is proposed in theoretical models, and 2. more knowledge is needed on how a mental healthcare provider can incorporate STP related activities in their corporate business.

Discussion and conclusions

Following the developments in the mental healthcare sector, the overarching intention of this study is to stimulate more evidence-based decision making in mental healthcare. The general aim of this study was to improve the general understanding of strategic market orientation in mental healthcare by developing and applying different instruments of strategic market orientation in a multiple case study design at GGzE. The results show that for each of the domains (mental healthcare demand, mental healthcare supply, stakeholders and the external environment) the application of instruments of strategic market orientation contribute to more knowledge about the mental healthcare market, and delivers guidelines for strategic choices regarding the market positioning of mental healthcare providers. Overall this should be conducive to more evidence-based decision making. This study does however not intend to establish a fixed set of instruments regarding strategic market orientation in mental healthcare. For each situation, a translation needs to be made to the appropriate context and abstraction level. The development of instruments for strategic market orientation in mental healthcare should furthermore be a continuous and iterative process, whereas the current study offers a starting point that needs further exploration. The most important conclusion that can be drawn from the study is that instruments for strategic market orientation are applicable in the practice of a mental healthcare provider and that this can contribute to more knowledge and more evidence-based decision making. The fact that the practical application differs on certain points from theoretical models, offers an important addition to general scientific knowledge on strategic market orientation in mental healthcare.

To be able to effectively use strategic market orientation in mental healthcare it is important to understand the 'sum of all parts' and to be able to integrate the knowledge that is developed in each of the domains into comprehensive knowledge for a mental healthcare provider. The added value of an integrated approach should be found in the compilation of information that is gained separately and in considering the influence of other domains on the interpretation of that specific information. Dynamics in the field of mental healthcare demand, mental healthcare supply, stakeholders and the external environment have interrelated effects on each other. It is therefore important to interpret the results of the different analyses in relation to those of other domains. This leads to a functional model for strategic market orientation in which it is essential to first determine and define the purpose and target population. The next step is strategic market orientation. The four different aims, related to the different domains, that should be captured

are: identifying patient profiles (mental healthcare demand), identifying stakeholder influences, exploring future developments and analyzing the supply market. The next step is to combine the knowledge that is generated from each of these analyses and discuss strategic choices regarding the market positioning of the organization. A marketing strategy should naturally follow these strategic choices. Eventually, this should be a contribution to the overall corporate strategy of the organization.

The efficacy of using knowledge for more evidence-based decision making is dependent on the capability of the organization to make the different transitions in the knowledge hierarchy: from data to information, from information to knowledge, and from knowledge to wisdom. For each transition an increasing extent of 'understanding' is needed. In this study knowledge is developed by gathering data and interpreting these data to find information on specific topics in the case studies at GGzE. This information is used to assess the applicability of instruments of strategic market orientation in mental healthcare (knowledge). This knowledge addresses a 'how'-question regarding strategic market orientation for mental healthcare providers. Evidence-based decision making (wisdom), based on this knowledge, is dependent on the capability to answer the question 'why' strategic market orientation is important for a mental healthcare provider and to actively translate this into policy measures.

Recommendations

This research has offered a first exploration into the possibilities for strategic market orientation instruments in the practice of a mental healthcare provider. In practice, it will be necessary to continuously further explore and adapt these instruments to be able to integrate this into a structural activity. Although changes are visible in mental healthcare organizations to respond to market dynamics and transitions in the mental healthcare sector, a more rigorous shift towards a market oriented approach is still needed. This means a mental healthcare provider should incorporate market research as an integral part of their multiyear policy cycle. Subsequently, it takes courage to actually use the results of this market research for strategic choices, also when this means the course of the organization needs to change. Following this, the organization needs to develop a marketing strategy to distinguish their added value to the different market participants. This means a corporate marketing function is needed, consisting of different parts: market research, market strategy (positioning), and a marketing (and communications) strategy. Although central expertise is valuable, it is essential that these concepts are incorporated and carried out in decentralized business parts as well. Directors and managers have a key role in contributing to a corporate strategy and translating this to an operational level. It challenges mental healthcare providers to be innovative and creative to rearrange a long history of high quality mental healthcare into a more market oriented supply, that is flexible enough to anticipate continuous market changes.

The transition to more evidence-based decision making in the practice of mental providers, should be accompanied by follow-up research. There are different aspects that should be covered by this.

First, the link between strategic market orientation and evidence-based decision making needs to be researched. Is a mental healthcare provider that uses instruments for strategic market orientation more effective in its decision making, more innovative, and do these organizations dispose of a better market position in the mental healthcare market? Research should be able to identify supporting and hampering factors for this transition in order to be able to improve this process at mental healthcare providers. Second, to improve the validity of the results and to be able to draw more generalizable conclusions, additional mental healthcare organizations should be included in future research in this area, whereas the instruments are now applied in a single organization. In additional research it should be studied whether the instruments are also applicable in different settings, which also includes different levels. For example, are these instruments also applicable for the mental healthcare sector as a whole? Third, the instruments themselves need further implementation and accompanying research. Within further research it should be questioned which criteria are important for the instruments to be successfully implemented in practice. This can lead to possible adaptations or different choices in the use of instruments for strategic market orientation in mental healthcare. In conclusion, further research should be aimed at contributing to more scientific evidence about the transition from knowledge to wisdom, or more specifically, from knowledge about strategic market orientation to more evidence-based decision making in mental healthcare.

Samenvatting (Dutch summary)

Introductie

Psychische ziekten beslaan een groot deel (11,4%) van de totale kosten aan gezondheidszorg in Nederland. Het afgelopen decennium is een grote toename zichtbaar geweest in zowel het aantal cliënten als in de uitgaven, wat heeft geleid tot verschillende stelselwijzigingen, bezuinigingen en deregulering in de geestelijke gezondheidszorg (GGz). Het resultaat hiervan is terug te zien in een meer competitieve markt, met gedecentraliseerde macht, bijvoorbeeld bij zorgverzekeraars, zorgconsumenten en gemeenten. Voor GGz aanbieders betekent dit een transformatie van een controlerende organisatie naar een marktorganisatie. Om te kunnen anticiperen op de ontwikkelingen in de GGz de komende jaren, is meer kennis nodig over strategische marktoriëntatie en de mogelijke instrumenten die hierbinnen zijn toe te passen. In de GGz is dit nog een relatief nieuw concept, hetgeen een aanleiding is geweest voor dit exploratieve onderzoek naar de mogelijkheden om een instrumentarium voor strategische marktoriëntatie voor GGz aanbieders te ontwikkelen en toe te passen. De kennis die hieruit voortkomt, wordt beoogd een incentive te zijn voor GGz aanbieders tot het vormen van een meer evidence-based strategisch positioneringsbeleid en in het verlengde hiervan het ontwikkelen van een marketingstrategie, als onderdeel van de corporate strategie van de organisatie.

Opzet van het onderzoek

Het overkoepelende doel van dit onderzoek is het stimuleren van GGz aanbieders om strategische marktoriëntatie in toenemende mate te ontplooien als onderdeel van strategische beleidsvorming. Een exploratief onderzoek naar de mogelijke instrumenten voor strategische marktoriëntatie in de GGz is uitgevoerd bij *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE), een GGz aanbieder in het zuiden van Nederland. Voor dit onderzoek zijn twee onderzoeksvragen geformuleerd:

1. Welke instrumenten zijn er beschikbaar om strategische marktoriëntatie vorm te geven in de GGz?
2. In welke mate zijn deze instrumenten toepasbaar in de praktijk van GGz aanbieders?

Een literatuur onderzoek en praktijkverkenning (interviews) zijn uitgevoerd om een raamwerk te ontwikkelen voor strategische marktoriëntatie in de GGz (kennissynthese). In een multiple case study design bij GGzE is de toepasbaarheid van verschillende instrumenten voor strategische marktoriëntatie verder geëxploreerd met behulp van zowel kwantitatieve als kwalitatieve methoden.

Kennissynthese

Strategische marktoriëntatie wordt in de literatuur beschreven als een activiteit welke in een organisatie nodig is om te kunnen inspelen op marktontwikkelingen, voor strategische positionering en voor het ontwikkelen van een effectieve marketingstrategie. Hiervoor is kennis nodig over en binnen vier verschillende domeinen van strategische marktoriëntatie: klantvraag,

aanbod, stakeholders en de externe omgeving. Voor de GGz kan dit worden vertaald als: *vraag naar GGz, aanbod van GGz, stakeholders* en de *externe omgeving*. In de literatuur en in de praktijk van veel profit organisaties zijn reeds verschillende instrumenten voor strategische marktoriëntatie beschreven.

Op basis van de kennissynthese werden vier instrumenten, één binnen elk van de vier domeinen, gekozen voor het empirische deel van het onderzoek: audience segmentation (vraag naar GGz), portfolio analyse (aanbod van GGz), stakeholder analyse (stakeholders), and scenario analyse (externe omgeving).

In vier empirische case studies zijn deze instrumenten verder geëxploreerd en toegepast in de praktijk van een GGz aanbieder (GGzE). De beoogde resultaten van de case studies zijn tweeledig: zij geven antwoord op een specifieke kennisvraag op het gebied van strategische marktoriëntatie bij GGzE én leveren inzicht in de toepasbaarheid van de instrumenten voor een GGz aanbieder in het algemeen.

Case study over de vraag naar GGz

In deze case study is de toepassing van audience segmentation als opmaat naar meer vraaggestuurde beleidsvorming verkend. Audience segmentation is een techniek welke veel toegepast wordt in social marketing om verschillende homogene subgroepen binnen een grotere populatie te onderscheiden. In het licht van de huidige discussie met betrekking tot de beddenafbouw in de Nederlandse GGz sector, was GGzE op zoek naar kennis waarmee zij inzicht krijgt in de cliëntgroepen waarvoor ambulante alternatieven voor klinische zorg passend zijn, zodat zij haar beleidskeuzes op dit gebied beter onderbouwd kan vormgeven.

In een mixed methods case study design is audience segmentation uitgevoerd om zo cliëntprofielen te ontwikkelen voor cliënten die op dat moment klinisch in behandeling waren bij het Centrum Psychotische Stoornissen van GGzE. Het doel was daarmee tweeledig: 1. het ontwikkelen van cliëntprofielen in het kader van de klinische beddenreductie en 2. het beoordelen van de toepasbaarheid van audience segmentation als instrument voor betere vraaggestuurde beleidsvorming. Ten aanzien van het eerste doel is een literatuuronderzoek uitgevoerd om bevorderende en belemmerende cliënt karakteristieken te vinden ten aanzien van de mogelijkheden voor extramuralisering. Vervolgens is een clusteranalyse toegepast om de verschillende subgroepen in de cliëntenpopulatie bij het Centrum Psychotische Stoornissen te vinden. Ten behoeve van de tweede doelstelling in de case study, het beoordelen van de toepasbaarheid van het instrument, zijn interviews gehouden op operationeel, tactisch en strategisch niveau.

De resultaten laten zien dat de clusteranalyse heeft geleid tot drie verschillende cliëntgroepen met homogene kenmerken, welke konden worden gerelateerd aan het debat over de beddenreductie: de crisisgroep, de groep met zwaardere problematiek en gehospitaliseerde ouderen. De crisisgroep bleek de meest geëigende groep te zijn voor extramuralisering, met name

door het terugbrengen van de ligduur bij deze groep cliënten. De bruikbaarheid van audience segmentation om cliëntprofielen in beeld te brengen en om deze informatie vervolgens te gebruiken voor strategische beleidsvorming ten aanzien van de beddenreductie, werd erkend op zowel operationeel, tactisch als strategisch niveau. Het werd ook onderschreven dat het gebruik van dit instrument kan bijdragen aan meer vraaggestuurde beleidsvorming.

Case study over stakeholders

De toepasbaarheid van een geïntegreerd model voor stakeholder management staat centraal in deze case study. Volgens de literatuur kan goed stakeholder management bijdragen aan een beter begrip van onderlinge verwachtingen en het verbeteren van de relatie met stakeholders. Dit is van groot belang in een tijd waarin vele transities in de GGz plaatsvinden en intensievere samenwerking tussen verschillende partijen van belang is. Dit vergroot de onderlinge afhankelijkheid die een GGz aanbieder en haar stakeholders ten opzichte van elkaar hebben.

Het beoordelen van de toepasbaarheid van een model voor stakeholder management heeft plaatsgevonden op basis van een case study bij GGzE, waarvoor de praktische aanleiding de vraag naar een organisatiebreed stakeholderbeleid was. De beoordeling heeft in twee onderdelen vorm gekregen: 1. het uitvoeren van een stakeholderanalyse zoals beschreven wordt in het (theoretisch) model (stakeholder identificatie, het identificeren van stakeholder verwachtingen, het vaststellen van performance gaps, het vaststellen van een stakeholder prioritering) en 2. het uitvoeren van een process- en effectevaluatie ten aanzien van het gebruik van het model. Voor het eerste gedeelte zijn gegevens verzameld door middel van literatuuronderzoek, vragenlijsten en interviews onder zowel stakeholders als interne respondenten. Voor het beantwoorden van het tweede gedeelte zijn een logboek bijgehouden en zijn interviews met managers van GGzE gehouden.

De stakeholderanalyse heeft geresulteerd in acht stakeholder groepen, elk met verschillende verwachtingen ten aanzien van GGzE. Over het algemeen wordt de samenwerking met GGzE door stakeholders als 'voldoende' beoordeeld. Vijf van de acht stakeholdergroepen worden door GGzE als zogenaamde 'definitieve' stakeholders gezien, wat betekent dat deze groepen een hoge prioriteit zouden moeten krijgen. Ten aanzien van de toepasbaarheid is een belangrijke bevinding het tijdrovende karakter dat de analyse met zich meebrengt. Daarnaast zouden de effecten verder geoptimaliseerd kunnen worden als de stakeholders zelf meer betrokken worden in de analyse. Stakeholder management wordt daarnaast gezien als een waardevolle tool om verschillende communicatiestrategieën voor verschillende stakeholdergroepen te ontwikkelen. Over het algemeen kan op basis van de resultaten worden gezegd dat stakeholder analyse, mits voldoende aangepast aan de context van de organisatie, kan bijdragen aan het integreren van stakeholder management in de strategische beleidsvorming van een GGz aanbieder.

Case study over de externe omgeving

De toepasbaarheid van scenario analyse als instrument voor het verkennen van de externe

omgeving van een GGz aanbieder staat centraal in deze case study. Scenario analyse is een instrument om op verschillende niveaus de externe ontwikkelingen van een organisatie in beeld te brengen. Hierna worden uit deze ontwikkelingen kernonzekerheden gekozen welke leiden tot vier scenario's welke allen realistisch maar onzeker zijn. De klinische beddenreductie heeft geleid tot een praktische vraag van GGzE en een aantal van haar samenwerkingspartners naar hoe de huisvesting voor mensen met een psychische beperking in de regio te organiseren.

De scenario analyse is uitgevoerd in een aantal stappen. Eerst is op basis van documentstudie en interviews een brede verkenning gedaan naar de ontwikkelingen op macro niveau die de GGz zouden kunnen gaan raken. Vervolgens zijn in een workshop met een expertpanel de kernonzekerheden gekozen en zijn vier verschillende scenario's ontwikkeld. De deelnemers aan het expertpanel waren vertegenwoordigers van zorgaanbieders in de regio, woningcorporaties en de gemeente.

De vier ontwikkelde scenario's zijn: 1) Geïntegreerd zelfstandig wonen in de maatschappij met professionele zorg; 2) Verantwoordelijke zorg ondersteund door de maatschappij; 3) Gedifferentieerd zorgaanbod binnen de muren van de instelling; 4) Wonen in grootschalige instituten met een onvervulde zorgbehoefte. Van hieruit waren beleidsmakers vanuit de verschillende betrokken organisaties in staat om concrete handvatten te formuleren voor beleidskeuzes op het gebied van wonen voor mensen met een psychische beperking op regionaal niveau. De leden van het expertpanel geven aan scenario analyse als een zeer waardevolle tool te zien om meer 'out of the box' te denken en om toekomstmogelijkheden te zien waar eerder niet aan gedacht werd. De resultaten zijn dan ook gebruikt in de verdere discussies over regionaal beleid op het gebied van wonen voor psychisch kwetsbaren. Uit de case study bleek een valkuil in het toepassen van de scenario analyse het hebben van een voorkeur voor één van de ontwikkelde scenario's, resulterend in beleidsplannen die gericht zijn op het realiseren van dat ene scenario. Dit terwijl de gedachte achter het instrument is om op verschillende toekomstbeelden te kunnen anticiperen. De studie heeft desondanks laten zien dat scenario analyse een zeer bruikbaar instrument is voor GGz aanbieders en kan leiden tot concrete uitgangspunten voor (strategisch) beleid.

Case study over het aanbod aan GGz

De interpretatie van het begrip 'aanbod aan GGz' bleek in de literatuur en de praktijk van GGz aanbieders divers te zijn. Dit domein van strategische marktoriëntatie wordt sterk gerelateerd aan het proces dat ook wel bekend staat als 'segmentation, targeting, en positioning', ofwel het STP-proces. Aanvullend op de analyses binnen de andere domeinen van strategische marktoriëntatie, is het van belang een beeld te ontwikkelen van het product portfolio van de organisatie, de marktpositie ten opzichte van andere aanbieders en dit te vertalen naar strategische keuzes en een marketingstrategie.

In deze case study is geëvalueerd wat de professionele groei is geweest op het gebied van strategische marktoriëntatie bij GGzE vanaf 2009, door het gebruik van verschillende instrumenten

binnen dit domein te beoordelen. Hiertoe is een documentstudie uitgevoerd, is een logboek registratie bijgehouden en is een interview gehouden met de manager op het gebied van marketing binnen GGzE.

De resultaten laten zien dat verschillende instrumenten binnen het STP-proces binnen de organisatie zijn verkend vanuit verschillende invalshoeken. Portfolio analyse is, in het verlengde van deze studie, twee maal toegepast in aanloop naar de jaarlijkse strategische heidagen van de organisatie, waarin een discussie plaatsvindt tussen Raad van Bestuur en directie over de plannen voor het komend jaar. Beide presentaties van de resultaten van de portfolio analyses laten zien dat een relatief beperkt gedeelte van de beoogde informatie kan worden gegenereerd. De variabelen welke zijn meegenomen, zijn: het aantal cliënten regionaal en bovenregionaal, resultaat per product en de personele kosten in relatie tot de producten. De daarop volgende stappen in het STP-proces (targeting en positioning) worden terug gevonden in de strategische plannen, maar sluiten nog niet direct aan op de resultaten uit deze portfolio analyses. Portfolio analyse wordt, zo blijkt uit de evaluatie, wel gezien als een instrument dat kan bijdragen aan beter onderbouwde beleidskeuzes ten aanzien van de strategische positionering. Dat dit in de praktijk van een GGz aanbieder (GGzE) nog niet direct zichtbaar is, kent op basis van de resultaten van deze studie twee mogelijke verklaringen: 1. meer complete informatie is nodig om portfolio analyse uit te voeren zoals dit in de theorie wordt voorgesteld en 2. er is meer kennis nodig bij een GGz aanbieder over het STP-proces en hoe dit te integreren is in de beleidscyclus van de organisatie.

Discussie en conclusies

Dit onderzoek beoogt eraan bij te dragen dat GGz aanbieders worden gestimuleerd tot meer evidence-based besluitvorming op basis van het uitvoeren van strategische marktoriëntatie. Het doel binnen het onderzoek was het vergroten van de kennis over en het begrip van strategische marktoriëntatie door verschillende instrumenten te exploreren en toe te passen in een multiple case study design bij GGzE. De resultaten laten zien dat voor ieder van de domeinen (vraag naar GGz, aanbod van GGz, stakeholders en de externe omgeving) de toepassing van instrumenten voor strategische marktoriëntatie kan bijdragen aan meer kennis over de GGz markt en handvatten kan bieden voor strategische keuzes ten aanzien van de positionering van GGz aanbieders. Met deze studie is echter niet een gevestigd instrumentarium neergezet voor strategische marktoriëntatie in de GGz. Wel is een basis ontwikkeld en is aangetoond dat het inzetten van instrumenten kan bijdragen aan meer kennis over de GGz markt bij een GGz aanbieder, wat beoogt bij te dragen aan meer evidence-based besluitvorming. Voor iedere situatie moet vervolgens een vertaling worden gemaakt naar de juiste context en naar het juiste abstractieniveau. Een verdere doorontwikkeling van de instrumenten zou daarnaast een continu en iteratief proces moeten zijn, waarvoor deze studie een startpunt biedt. De bevinding dat de praktische toepassing in verschillende situaties afwijkt van de theoretische modellen, biedt daarnaast een belangrijke bijdrage aan de wetenschappelijke kennis over het gebruik van instrumenten voor strategische marktoriëntatie in de GGz.

Om strategische marktoriëntatie effectief te gebruiken is het van belang de som der delen te begrijpen, en in staat te zijn informatie vanuit de verschillende domeinen te integreren tot een geheel aan kennis welke bruikbaar is voor een GGz aanbieder. De meerwaarde van een dergelijke geïntegreerde aanpak moet worden gevonden in de bundeling van informatie die door het inzetten van verschillende instrumenten wordt verkregen en de onderlinge relaties en afhankelijkheden welke uit deze informatie kan worden afgeleid. De dynamiek op het gebied van de vraag naar GGz, het aanbod van GGz, stakeholders en de externe omgeving hebben onderlinge effecten op elkaar. Het is daarom van belang de resultaten van iedere analyse te bezien in het licht van de resultaten uit andere analyses. Dit leidt uiteindelijk tot een meer functioneel model voor strategische marktoriëntatie. Hierin is het van belang als eerste het doel en de doelgroep te bepalen. De volgende stap is het inzetten van de verschillende analyses om over ieder van de domeinen van strategische marktoriëntatie – en de onderlinge samenhang – kennis te ontwikkelen: het in kaart brengen van cliëntprofielen (vraag naar GGz), het identificeren van en afstemmen op verwachtingen van stakeholders, het verkennen van de externe omgeving en het analyseren van het aanbod aan GGz. De vervolgstap is het integreren van deze kennis en de discussie te voeren over strategische keuzes ten aanzien van de positionering van het aanbod van de organisatie. Een marketingstrategie zou logischerwijs moeten volgen uit deze strategische keuzes en moeten bijdragen aan de corporate strategie van de organisatie.

Het rendement van de gegenereerde kennis op meer evidence-based besluitvorming is afhankelijk van het vermogen van de organisatie om de verschillende overgangen in de kennishiërarchie te maken: van data naar informatie, van informatie naar kennis en van kennis naar wijsheid. Voor iedere overgang is een toenemende mate van 'begrip' nodig. In deze studie is kennis ontwikkeld door het verzamelen van data en het interpreteren van deze data om informatie te vinden gerelateerd aan specifieke onderwerpen in de case studies bij GGzE. Deze informatie is gebruikt om de toepasbaarheid van de instrumenten van strategische marktoriëntatie te beoordelen (kennis). Deze kennis heeft betrekking op de 'hoe'-vraag ten aanzien van strategische marktoriëntatie voor GGz aanbieders. Evidence-based besluitvorming, gebaseerd op deze kennis, is afhankelijk van het vermogen om de 'waarom'-vraag te beantwoorden – waarom is strategische marktoriëntatie van belang voor een GGz aanbieder – en vervolgens in staat te zijn dit actief te vertalen naar beleidsmaatregelen.

Aanbevelingen

Dit onderzoek biedt een eerste exploratie naar de mogelijkheden voor strategische marktoriëntatie in de praktijk van een GGz aanbieder. In de praktijk zal het nodig zijn steeds op zoek te blijven naar mogelijkheden en noodzakelijkheden om de instrumenten verder aan te passen en marktonderzoek verder te integreren als een structurele activiteit. Ondanks dat veranderingen zichtbaar zijn in GGz organisaties om in te kunnen spelen op de dynamiek en vele transities in de sector, is een nog rigoureuzere shift nodig naar een marktorganisatie. Dit betekent dat activiteiten

op het gebied van strategische marktoriëntatie meer geïntegreerd zouden moeten worden in de praktijk van GGz aanbieders als onderdeel van het meerjarenbeleid. Vervolgens is een bepaalde mate van lef nodig om de resultaten van marktonderzoek ook te vertalen naar, soms pijnlijke, strategische keuzes. Dit zien we wel steeds meer gebeuren. Uiteindelijk moet dit de organisatie in staat stellen een marketing strategie te ontwikkelen om zich te kunnen onderscheiden van andere aanbieders op de markt. Een corporate marketing functie zou daarvoor moeten bestaan uit verschillende segmenten: marktonderzoek, strategie en marketing en communicatie. Naast centraal gebundelde expertise is een decentrale borging van deze activiteiten essentieel. Directeuren en managers van de verschillende bedrijfsonderdelen vervullen een sleutelpositie in de vertaling van de organisatiestrategie naar operationeel niveau. Dit alles daagt GGz aanbieders uit om innovatief en creatief te zijn in het reorganiseren van een soms lange geschiedenis van hoogwaardige GGz naar een meer marktgericht aanbod en daarnaast flexibel genoeg te zijn om dit continue aan te passen aan de marktontwikkelingen.

De transitie naar meer evidence-based besluitvorming in de praktijk van GGz instellingen moet gepaard gaan met verder onderzoek. Verschillende aspecten zouden daar in moeten worden meegenomen. Ten eerste moet de link tussen strategische marktoriëntatie en evidence-based besluitvorming verder worden onderzocht. Daarbij is een essentiële vraag of GGz aanbieders die instrumenten voor strategische marktoriëntatie gebruiken ook daadwerkelijk effectiever en innovatiever zijn in hun besluitvorming en beschikken over een betere marktpositie dan andere organisaties. Onderzoek zou in kaart moeten brengen wat de bevorderende en belemmerende factoren zijn om dit proces voor GGz aanbieders te kunnen verbeteren. Ten tweede zouden, om de validiteit van de resultaten te vergroten en meer generaliseerbare conclusies te kunnen trekken, meer GGz aanbieders moeten worden betrokken in vervolgonderzoek op dit gebied, waar de instrumenten nu zijn toegepast in één organisatie. In aanvullend onderzoek zou moeten worden gekeken of deze instrumenten ook toepasbaar zijn in verschillende contexten en op verschillende niveaus. Zijn deze instrumenten bijvoorbeeld ook toepasbaar op sectorniveau? Ten derde moeten de instrumenten zelf verder worden geïmplementeerd wat gepaard gaat met onderzoek. Hierin is het van belang te onderzoeken welke criteria van belang zijn voor een succesvolle implementatie, wat kan leiden tot mogelijke aanpassingen in het instrumentarium of een keuze voor andere dan de basisinstrumenten. In conclusie, verder onderzoek zou erop gericht moeten zijn bij te dragen aan meer wetenschappelijk bewijs voor de transitie van kennis naar wijsheid, meer specifiek, van kennis over strategische marktoriëntatie naar meer evidence-based besluitvorming in de GGz.

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Some call it faith,
Some call it love.
Some call it guidance from above.
You are the reason we found ours,
So thank you stars.
(Katie Melua, 2005)

About the author

Joyce Bierbooms (Wouw, 13 February 1980) graduated in 1998 from pre-university education at Markenhage College in Breda. After her graduation she started her Business Communications Studies at Radboud University Nijmegen. She finished this study with a master's thesis on internal communication within a multinational (Augeo Software). After her studies she started as a junior consultant (Scenter) to work on projects related to organizational changes and (marketing)communications. In February 2004 Joyce started her career in (mental) healthcare at *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE). She started working at the Planning & Control department and worked at several projects related to the system reforms in mental healthcare. In 2007 she started with the preparations for her PhD study on strategic market orientation in mental healthcare, which she initially performed at the Planning & Control department and from 2009 onwards at GGzE's Research and Development department. In 2012 she combined her position at he R&D department with a position as a policy employee for GGzE's board of directors. In this position she has been working on subjects related to GGzE's policy on research and innovation. Furthermore, she has been investing in the transition from the results of her PhD research towards a practical implementation in close cooperation with GGzE's Sales and Marketing department. She performed her PhD as a science practitioner in cooperation with Tranzo (Scientific center for care and welfare) at Tilburg University within the academic center 'Geestdrift'.

Joyce Bierbooms (Wouw, 13 februari 1980) behaalde in 1998 haar VWO diploma aan het Markenhage College te Breda. Hierna startte zij haar studie Bedrijfscommunicatie aan de Radboud Universiteit Nijmegen, waarin zij in 2002 afstudeerde met een scriptie over de interne communicatie binnen een multinational (Augeo Software). Hierna werkte zij voor een organisatie- en adviesbureau (Scenter) als junior consultant aan diverse projecten op het gebied van organisatieveranderingen en (marketing)communicatie. In februari 2004 maakte Joyce de overstap naar de (geestelijke) gezondheidszorg en startte zij bij *Stichting Geestelijke Gezondheidszorg Eindhoven en de Kempen* (GGzE). Zij is daar begonnen als adviseur Planning & Control en heeft vanuit deze functie meegewerkt aan verschillende projecten gerelateerd aan de stelselveranderingen in de GGz. In 2007 is zij gestart met de voorbereidingen voor het promotieonderzoek naar strategische marktoriëntatie in de GGz, welke zij in eerste instantie vanuit haar functie bij P&C en vanaf 2009 vanuit de afdeling Onderzoek en Ontwikkeling bij GGzE heeft uitgevoerd. Vanaf 2012 werkt ze deels als beleidsadviseur binnen het Stafbureau Raad van Bestuur en deels bij O&O. Vanuit haar rol als beleidsadviseur is zij betrokken bij zaken op het gebied van academisering en innovatie binnen GGzE en werkt zij aan de vertaalslag van de resultaten van haar promotieonderzoek naar de praktijk. Dit laatste doet zij in nauwe samenwerking met de afdeling Verkoop en Marketing van GGzE. Haar promotieonderzoek heeft zij uitgevoerd als science practitioner in samenwerking met Tranzo aan de Universiteit van Tilburg, binnen de academische werkplaats 'Geestdrift'.

List of publications

Publications

Published

Bierbooms JJPA, Bongers IMB, Van Oers JAM. Strategic market orientation in mental healthcare: A knowledge synthesis. International Journal of Healthcare Management 2012;5(3):141-153.

Bierbooms JJPA, Bongers IMB, Van Oers JAM. A scenario analysis of the future residential requirements for people with mental health problems in Eindhoven. BMC Medical Informatics and Decision Making 2011;11(1).

Bierbooms JJPA, Bongers IMB, Vossen MLJW. Wonen voor psychisch kwetsbaren in 2020: in het bos of in uw achtertuin? Best Practices Zorg 2009;4:35-40.

Bierbooms JJPA. De toekomst van de Brabantse zorg: een verkenning tot 2025. Tijdschrift voor Gezondheidswetenschappen (TSG) 2008;86(3):129-130.

Accepted for publication

Bierbooms JJPA, Bongers IMB, Van Oers JAM. An evaluation of the development of a marketing strategy in mental healthcare delivery. *International Journal of Healthcare Management.*

Submitted for publication

Bierbooms JJPA, Van Oers JAM, Rijkers JPA, Bongers IMB. The application of a comprehensive model of stakeholder management in mental healthcare. *Resubmitted after revision.*

Bierbooms JJPA, Bongers IMB, Reemers B, Van Oers JAM. Audience segmentation as a stepping stone towards demand oriented policy making in mental healthcare: a mixed methods case study in the Netherlands. *Submitted.*

Presentations

Bierbooms JJPA, Bongers IMB. *Evidence-based Management: scenarioanalyse als methode voor het onderbouwen van toekomstig beleid.* Workshop als onderdeel van de managementmodule binnen de opleiding tot klinisch psycholoog. Eindhoven: 11 maart en 27 mei 2013.

Draad HJJ, Bierbooms JJPA. *Drieluik 'droom, werkelijkheid en verwezenlijking'.* Presentatie tijdens de

strategische heidagen GGzE. Herkenbosch: 11-12 april 2012.

Bierbooms JJPA. *Integrated policy planning to achieve community-based care for people with mental health problems*. Porto: EHMA Annual Conference, 23 juni 2011.

Van Ham MAJAE, Bierbooms JJPA. *Intern organiseren van meten en verzamelen, lust of last?* Den Haag: Studiedag Zien en gezien worden, 26 maart 2009.

Bierbooms JJPA. *Scenarioanalyse 'Wonen voor GGz cliënten'*. Workshop voor zorgaanbieders van GGz, woningcorporaties en gemeente. Eindhoven: 4 november 2008.

Bierbooms JJPA. *Vraag en aanbodontwikkeling in de GGz. Een aanzet tot een eerste conceptueel model.* Presentatie tijdens de Informatiemiddag Academische Werkplaats Geestdrift. Eindhoven: 2 oktober 2008.

Bierbooms JJPA. *Vraag en Aanbod in de GGz. Het ontwikkelen van nieuwe Managementinformatie.* Presentatie tijdens de HEAD bijeenkomst. Eindhoven: 27 juni 2008.

Bierbooms JJPA, Bongers IMB, Van Ham MAJAE, Joosten TCM. *Beleidsonderzoek in de gehele zorgketen.* Amsterdam: Voorjaarscongres Nationale Vereniging voor Psychiatrie, 9 april 2008.

Bierbooms JJPA. *Vraag en aanbodontwikkeling in de GGZ.* Presentatie tijdens de Informatiemiddag Academische Werkplaats Geestdrift. Tilburg: 5 november 2007.

Bierbooms JJPA. *Vraag en aanbodontwikkeling in de GGZ.* Presentatie tijdens de Tranzo heidagen. Oisterwijk: 19-20 november 2007.